CONVECTIVE WATCH DECENTRALIZATION

PRODUCT FORMAT TEAM PLAN

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CONVECTIVE WATCH DECENTRALIZATION PRODUCT FORMAT TEAM

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THE PRODUCT FORMAT PLAN FOR THE CONVECTIVE WATCH DECENTRALIZATION

National Weather Service Product Format Team

1. INTRODUCTION AND BACKGROUND

In 1995, the National Severe Storms Forecast Center was administratively partitioned into the Aviation Weather Center (AWC) and the Storm Prediction Center (SPC), both components of the National Centers for Environmental Prediction (NCEP). Responsibility for issuing convective watches currently resides with the SPC, but the NWS proposes to move that function to future Weather Forecast Offices (WFO). Migrating the convective watch responsibility from the SPC to WFOs will be complex due to changes occurring both in the NCEPs and field offices. NWS field office structure is changing from its two-tiered arrangement (NEXRAD Weather Service Forecast Offices--NWSFO and Weather Service Offices) to become single tiered (WFOs). Because of the complexity of reassigning convective watch responsibility amid such dramatic changes, the watch program transfer will be performed incrementally. Each Phase will be preceded by a field test involving the SPC and AWC, field offices, National and Regional Headquarters, and NWS external customers. The program to shift convective watch responsibility, called the Convective Watch Decentralization, will begin in 1997 and will be completed late in 2001. Upon its completion, WFOs will be issuing convective watches for their County Warning and Forecast Area (CWFA) using guidance from the SPC in conjunction with locally acquired information.

One of the functions of the SPC is to serve the WFOS another is to provide products to the private meteorological community. The SPC will serve WFOs by interacting with forecasters using their experience and expertise on specific types of events, some of which will require training and may be rare at any individual locale prior to the completion of that training. Even after implementation of Watch Decentralization, SPC forecasters will keep WFO forecasters advised on areas of potential and ongoing weather hazards through gridded, graphical and narrative messages, guidance, and guidance watches. In addition to WFOS, the suite of products and services from SPC will be useful to other National Centers, to River Forecast Centers (RFC), and to a wide variety of agencies outside the NWS. Many SPC products will be non-technical or semi-technical, others will be highly technical in nature (as with gridded data).

Product Format.

Product assembly, including both content and format, is a concern that requires specific treatment. The Product Format Team, consisting of NWS field forecasters, Regional program leaders, and commercial providers of weather information, is assembled to examine the viability of the convective watch product suite. Based partly on information obtained from service evaluation and partly on knowledge of hardware/software needs, the Product Format Team is responsible for ensuring convective watch products are transmitted, received and used effectively both internally and externally. Team members were selected based on their interest and expertise in the area of product format and delivery. Specific concerns include the relationship of convective watch products to the Advanced Weather Interactive Processing System (AWIPS), Universal Geographic Codes (UGC), needs of customers regarding presentation of information, and communications technologies,

This plan outlines specific convective watch related products issued by SPC and future WFOs during each Phase of the Decentralization. For each Phase, SPC will be responsible for a variety of guidance as well as internal and external products. In consonance, future WFOs assume responsibility for an increasing number of watch related products. Ensuring that such information is supplied in the format (encoding, presentation, content) needed to meet customer needs is essential for the successful implementation of the watch Decentralization.

2. INCREMENTAL PHASES

The Convective Watch Decentralization will be accomplished over four Phases. Each Phase of the decentralization involves the same progression of events. Each Phase requires 1) beta testing, 2) field testing, 3) operations, and 4) service evaluation of operations. Each operational Phase serves as a risk reduction for the subsequent Phase. This approach to the implementation of Watch Decentralization, minimizes risk. The Product Format Team will review planning and development from the Training and Evaluation Watch Decentralization Teams, including preparation of training plans; field test plans; operational plans, and service evaluation plans.

Once beta test are complete and comments from team members are incorporated into the formats, the plans for field testing have been approved, needed training completed, software/hardware developed, and communications enabled, a field test will assess the usefulness of equipment, products and communications. Service evaluation will parallel each field test, during which time needed adjustments can be made. On the basis of a favorable service evaluation report at the conclusion of each field test, a decision can be made to proceed with operations.

Once plans for operations have been approved, and necessary administrative procedures taken (WSOM Chapter updates, product change requests, customer notifications, etc.), operations for the Phase may proceed. Again, service evaluation parallels operations, and changes may be made to operational procedures should conditions warrant. A service evaluation report will be made six months after the commencement of each operational Phase. Based on a favorable report,

recommendation would be made to the Assistant Administrator for Weather Services (AA) for proceeding with the subsequent Phase.

2.1 PHASE I

Phase I changes the convective watch geometry from a parallelogram to a polygon of not more than six (6) sides. The watch usually covers County Warning and Forecast Areas (CWFA) of multiple NWSFOs and NEXRAD Weather Service Offices (NWSO). Phase I also introduces a product issued by future WFOs (NWSFOs and NWSOS) to issue, clear, and cancel watches, called the Watch County Notification (WCN). It allows external customers, the SPC and AWC to update their watch information based on Universal Geographic Codes (UGC). Successful implementation of Phase I is predicated on the hardware to update the National Warning System (NAWAS) or implement other voice communications technologies at SPC, AWC and future WFOS for use in coordination, as well as computer software at the SPC, AWC, NCEP Central Operations (NCO) and future WFOs to transmit and process watch information. Service evaluation of Phase I operations will enable the AA to make a determination on proceeding with Phase II. WFOs may wish to locally produce and distribute (or make available on their homepages) graphical watch products for their local customers.

During Phase I, the SPC will be responsible for the following products:

- Day One Convective Outlook (AFOS Product SWODY1)
- Day Two Convective Outlook (AFOS Product SWODY2)
- Aviation Weather Watch (AFOS Product SAW)
- SPC Watch County Listing (AFOS Product SEV--internal)
- Public Watch Narrative (AFOS Product SEL)
- Mesoscale Discussion (AFOS Product SWOMCD)
- Watch Status Report (AFOS Product WWA)
- Watch Outline Update (AFOS Product WOU)

Future WFOs will be responsible for:

- Watch County Notification (AFOS Product WCN) for providing the redefining list of counties for the purposes of, issuing, clearing and cancelling counties in a watch
- Optional Locally Produced Graphic or Image Product

Appendix A of this plan includes examples of each Phase I product, along with its description, purpose, and intended audience.

Beginning with Phase I, SPC also is responsible for the WOU twice an hour (H+20 and H+50). The WOU is produced by checking WCNs and updating the spatial watch configuration for use by the AWC and NCEP Central Operations (NCO). AWC will use the SPC information for Convective SIGMETS. NCO will use the SPC watch clearance information to update the depiction of watches on the National Radar Summary chart.

2.2 Phase II

Phase II is the risk reduction and Beta Test for the initial decentralized environment. A subset of contiguous future WFOS, possessing Advanced Weather Interactive Processor (AWIPS) capabilities needed for performing convective watches, will participate. These offices will generate actual watches in real-time, supported by narrative, graphical, probabilistic guidance information and guidance watches from the SPC. The guidance watches will be of sufficient quality that, if need be, they could be released by the WFO without significant changes. The AWC will update convective watch graphics and narrative information for NCO and the National Radar Summary chart every 30 minutes. Evaluation of Phase II will supply information for the AA to make a determination about proceeding with the initial decentralized environment (Phase III).

The Phase II product suite from SPC marks a dramatic change from generating the public watch to providing guidance in support of WFO generated public watches. In addition to the Phase I products the Phase II SPC products include:

Hazardous Weather Guidance (HWG)
Guidance Watch (SEV)
Mesoscale Discussion (MCD)

The HWG incorporate and provides added temporal resolution to the day 1 and day 2 outlook, formally supplied by the SWO DYl/DY2. The SEV serves the WFO with needed guidance to generate the public watch. It is formatted in such a way that, if need be, it could be passed on as the watch with little or no modification by the WFO. The MCD provides information analogous to what was supplied by the Mesoscale Convective Discussion but, with greater specificity and a short term forecast.

The WFO is responsible for Alphanumeric and Graphic/Image:

Public Watch Narrative (AWIPS Product WCN, WMO header ?)
Watch Clearance Notification (AWIPS Product WCN, WMO header ?)
Watch Cancellation Notification (AWIPS Product
WCN, WMO header ?)
Status Report (AWIPS Product WWA, WMO Header ?)

Appendix B of the this plan provides examples of each Phase 11 product, including its description, purpose, and intended audience.

2.3 Phase III

Phase III is national implementation of the initial decentralized environment.

In Phase III WFOs generate alphanumeric and graphic/image convective watches based on a gridded, graphical or narrative, probabilistic guidance product from the SPC, a guidance watch product from the SPC, NCEP model guidance, and locally-generated diagnostic and observational information. Phase III (as with Phase II) is predicated on the availability of graphical and/or narrative, probabilistic convective watch guidance (including the guidance watch) from the SPC. Again as with Phase II, it is predicated also on the successful implementation of AWIPS at each WFO with sufficiently robust software to process data sets from multiple sources, to ingest and display gridded or graphical, probabilistic convective watch information from the SPC, to ingest and process a guidance watch from the SPC, and to communicate the WFO watch product locally and nationally. Further, it is predicated on the successful completion by WFO forecasters of specific training modules that address how severe local storms develop, intensify, and generate weather hazards (the detailed Training Plan should be on the OM hot topics page). Finally, it is predicated on the assurance by the meteorologist-in-charge of each WFO that the Office's forecasters are ready to assume watch responsibility. Service evaluation of Phase III operations will enable the AA to make a determination on proceeding with Phase IV.

Commensurate with the beginning of Phase III, the SPC drops all products that supported Phase I and begins providing Phase III type products for the entire CONUS.

2.4 Phase IV

Phase IV is the fully implemented decentralized environment, using gridded probabilistic guidance from the SPC, WFOs using AWIPS, will locally establish parameters for alert notifications that will allow them to interactively produce locally generated watches. The gridded information will flow into the WFO AWIPS, where product generators use the locally established parameters to create alphanumeric and graphic/image draft watch products. Phase IV is predicated on SPC developing appropriate gridded products on their AWIPS platform that can be transmitted for processing by all AWIPS sites. At this point in time WMO headers will have replaced the nine character AFOS scheme. Service evaluation will be ongoing, and iterative improvements in the convective watch program are expected in Phase IV and beyond.

3.0 Summary

Substantial work remains to be accomplished by the Watch Decentralization Product Format Team to define the format both of SPC and WFO Phase IV products. It cannot be understated that the successful conduct of a Beta Test that addresses the needs of NWS field forecasters, Regional program leaders, and commercial providers of weather information be conducted before attempting the conduct of each phase of the field test. In addition formats may also need modifications during the testing process based on local and national user needs.

APPENDIX A: PHASE I PRODUCT FORMATS

PART ONE: FUTURE ALPHANUMERIC WFO PRODUCTS

Purpose:

Future WFO Products for the purpose of issuing, clearing, and canceling convective watches in the WFO's CWA.

Intended Audience:

These products are intended for use in local and national meteorological applications for both the public and private sectors.

Product Description:

The body of the product is composed of three segments the first is a list of UGC codes for areas being cleared or canceled with respect to the watch and the second is the list of UGC codes for areas where the watch is in effect. The third segment of the body of the product contains a brief call to action statement.

The first two segments of the AC each contain a UGC listing of the appropriate areas. The segments, in the body of the AC, are separated by a "$$" after the listing of areas that are being cleared or canceled and after the list of areas where the watch is in effect.. In the cases of , initial watch issuance, or where the watch has been canceled or cleared the UGC codes are listed as 999 to indicate a null set for that portion of the product.

Three formats have been developed to accommodate regional and local format preferences. The first format, "area off" is a listing of counties by state with a list of some of site defined cities included in the watch after the list of counties. The second format is "area on", "area city off", this format separates the counties included in the watch into site defined sub-parts of states and provides a consolidated, site defined list of cities, after all of the sub-part county lists. The third format is the "area on", "city area on". The third format separates the watch into, site defined sub-parts of states and immediately after each sub-part of state list is the site defined list of cities that are located in that respective sub-part of the state.

ZIP WATCH COUNTY NOTIFICATION FORMAT 1: "AREA OFF"

PURPOSE I: ISSUING

ZCZC ARBWCNGRR
TTAA00 KGRR 121445

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #42
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
945 AM EST WED FEB 12 1997

MIC999-INC999-OHC999-LMC999-122000-

$$

MIC005-015-067-081-107-117-121-123-127-139-122000-
THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM WATCH IN EFFECT UNTIL 300 PM EST WEDNESDAY FOR THE FOLLOWING COUNTIES:

IN MICHIGAN:

ALLEGAN	BARRY	IONIA
KENT	MECOSTA	MONTCALM
MUSKEGON	NEWAYGO	OCEANA
OTTAWA		

THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...GRAND RAPIDS...AND HOLLAND

$$

A SEVERE THUNDERSTORM WATCH MEANS SEVERE THUNDERSTORMS ARE POSSIBLE IN AND NEAR THE WATCH AREA. BE ON THE WATCH FOR THREATENING WEATHER AND LISTEN TO NOAA WEATHER RADIO... COMMERCIAL RADIO OR TELEVISION FOR FURTHER INFORMATION.

NNNN

PURPOSE II: CLEARING

ZCZC ARBWCNGRR
TTAA00 KGRR 131849 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #43
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
149 PM EST THU FEB 13 1997

MIC005-015-081-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #42.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN MICHIGAN:

ALLEGAN BARRY KENT
OTTAWA

THIS INCLUDES THE CITIES OF...GRAND HAVEN...GRAND RAPIDS...AND HOLLAND

$$

MIC021-027-077-159-132200-
SEVERE THUNDERSTORM WATCH #43 REMAINS VALID UNTIL 500 PM EST THURSDAY
FOR THE FOLLOWING COUNTIES:

IN MICHIGAN:

BERRIEN CASS KALAMAZOO
VAN BUREN

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BENTON HARBOR

$$

NNNN

PURPOSE III: CANCELLATION

ZCZC ARBWCNGRR
TTAA00 KGRR 131852 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #34
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
152 PM EST THU FEB 13 1997

MIC005-015-021-025-027-077-159-132000-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #34
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN MICHIGAN:

ALLEGAN BARRY BERRIEN
CALHOUN CASS KALAMAZOO
VAN BUREN

THIS INCLUDES THE CITIES OF...HOLLAND...KALAMAZOO...BATTLE CREEK... AND
BENTON HARBOR

$$

MIC999-INC999-OHC999-LMC999-132000-

$$

NNNN

ZIP WATCH COUNTY NOTIFICATION FORMAT 2: AREA "ON" AREA CITY "OFF"

PURPOSE I: ISSUING

ZCZC ARBWCNGRR
TTAA00 KGRR 121452

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORMS WATCH #47
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
952 AM EST WED FEB 12 1997

MIC999-INC999-OHC999-LMC999-122000-

$$

MIC005-015-021-023-025-027-045-067-077-081-107-117-121-123-127-139-
149-159-122000-
THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM WATCH
IN EFFECT UNTIL 300 PM EST WEDNESDAY FOR THE FOLLOWING COUNTIES:

IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OCEANA OTTAWA

IN WEST CENTRAL MICHIGAN:
IONIA KENT MECOSTA
MONTCALM NEWAYGO

IN CENTRAL MICHIGAN:
EATON

IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN BERRIEN CASS
VAN BUREN

IN SOUTH CENTRAL MICHIGAN:
BARRY BRANCH CALHOUN
KALAMAZOO ST JOSEPH

THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...GRAND
RAPIDS...HOLLAND...KALAMAZOO...BATTLE CREEK...AND BENTON HARBOR

$$

NNNN

PURPOSE II: CLEARING

ZCZC ARBWNCGRR
TTAA00 KGRR 131841 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #48
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
141 PM EST THU FEB 13 1997

MIC067-081-121-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #48.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA

IN WEST CENTRAL MICHIGAN:
IONIA KENT

THIS INCLUDES THE CITIES OF...MUSKEGON...GRAND HAVEN...AND GRAND RAPIDS

$$

MIC005-015-077-159-132200-
SEVERE THUNDERSTORM WATCH #48 REMAINS VALID UNTIL 500 PM EST THURSDAY
FOR THE FOLLOWING COUNTIES:

IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN VAN BUREN

IN SOUTH CENTRAL MICHIGAN:
BARRY KALAMAZOO

THIS INCLUDES THE CITIES OF...HOLLAND...AND KALAMAZOO

$$

NNNN

PURPOSE III: CANCELING

ZCZC ARBWCNGRR
TTAA00 KGRR 131843 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #32
...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
143 PM EST THU FEB 13 1997

MIC005-015-077-159-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #32.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN VAN BUREN

IN SOUTH CENTRAL MICHIGAN:
BARRY KALAMAZOO

THIS INCLUDES THE CITIES OF...HOLLAND...AND KALAMAZOO

$$

MIC999-INC999-OHC999-LMC999-132200-

$$

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ZIP WATCH COUNTY NOTIFICATION FORMAT 3: AREA "ON" AREA CITY "ON"

PURPOSE I: ISSUING

ZCZC ARBWCNGRR
TTAA00 KGRR 131723

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #34
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
1223 PM EST THU FEB 13 1997

MIC999-INC999-OHC999-LMC999-132000-

$$

MIC005-021-027-067-081-117-121-123-139-159-132000-
THE NATIONAL WEATHER SERVICE HAS ISSUED A SEVERE THUNDERSTORM WATCH IN EFFECT UNTIL 300 PM EST THURSDAY FOR THE FOLLOWING COUNTIES:

IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA

THIS INCLUDES THE CITIES OF...MUSKEGON...AND GRAND HAVEN

IN WEST CENTRAL MICHIGAN:
IONIA KENT MONTCALM
NEWAYGO

THIS INCLUDES THE CITY OF GRAND RAPIDS

IN SOUTHWEST COASTAL MICHIGAN:
ALLEGAN BERRIEN CASS
VAN BUREN

THIS INCLUDES THE CITIES OF...HOLLAND...AND BENTON HARBOR

$$

NNNN

PURPOSE II: CLEARING

ZCZC ARBWCNGRR
TTAA00 KGRR 131815 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #33 ...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
115 PM EST THU FEB 13 1997

MIC067-081-121-139-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED A PORTION OF SEVERE THUNDERSTORM WATCH #33.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN CENTRAL COASTAL MICHIGAN:
MUSKEGON OTTAWA

THIS INCLUDES THE CITIES OF...MUSKEGON...AND GRAND HAVEN

IN WEST CENTRAL MICHIGAN:
IONIA KENT

THIS INCLUDES THE CITY OF GRAND RAPIDS

$$

MIC021-023-025-027-077-149-159-132200-
SEVERE THUNDERSTORM WATCH #33 REMAINS VALID UNTIL 500 PM EST THURSDAY
FOR THE FOLLOWING COUNTIES:

IN SOUTHWEST COASTAL MICHIGAN:
BERRIEN CASS VAN BUREN

THIS INCLUDES THE CITY OF BENTON HARBOR

IN SOUTH CENTRAL MICHIGAN:
BRANCH CALHOUN KALAMAZOO
ST JOSEPH

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BATTLE CREEK

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NNNN

PURPOSE III: CANCELING

ZCZC ARBWCNGRR
TTAA00 KGRR 131821 AMD

WATCH COUNTY NOTIFICATION FOR SEVERE THUNDERSTORM WATCH #39 ...UPDATED
NATIONAL WEATHER SERVICE GRAND RAPIDS MI
121 PM EST THU FEB 13 1997

MIC021-023-025-027-077-149-159-132200-
THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS HAS
CLEARED ALL COUNTIES REMAINING IN SEVERE THUNDERSTORM WATCH #39.
COUNTIES CLEARED FROM THE SEVERE THUNDERSTORM WATCH INCLUDE:

IN SOUTHWEST COASTAL MICHIGAN:
BERRIEN CASS VAN BUREN

THIS INCLUDES THE CITY OF BENTON HARBOR

IN SOUTH CENTRAL MICHIGAN:
BRANCH CALHOUN KALAMAZOO
ST JOSEPH

THIS INCLUDES THE CITIES OF...KALAMAZOO...AND BATTLE CREEK

$$

MIC999-INC999-OHC999-LMC999-132200-

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NNNN

NOTE: FUTURE WFO GRAPHIC OR IMAGE PRODUCTS

Graphic or Image products have not been developed for WFOs at this point in time, offices may wish to format the ZIP county display into a PCX or GIF file for display on their homepage.

PART TWO: INTERACTIVE FORECAST PROCESSING SYSTEM (IFPS) ALPHANUMERIC AND GRAPHIC OR IMAGE PRODUCTS:

Presently these products are in the final stage of development and TDL will provide them when the development is complete.

PART THREE: SPC PHASE I PRODUCTS:

11/17/97

The SPC alphanumeric and graphical products to be produced during Phase I of Convective Watch Decentralization inlcude:

1. DAY 1 CONVECTIVE OUTLOOK (0-24 h):
TEXT: ***MKCSWODY1***
GRAPHICS: ***94O***

2. DAY 2 CONVECTIVE OUTLOOK (24-48 h):
TEXT: ***MKCSWODY2***
GRAPHICS: ***98O***

3. PUBLIC SEVERE WEATHER OUTLOOK (as needed):
TEXT: ***MKCPWOMKC***

4. MESOSCALE DISCUSSIONS (0-3 h):
TEXT: ***MKCSWOMCD***

5. AVIATION WEATHER [SEVERE THUNDERSTORM / TORNADO] WATCH (0-6 h):
TEXT: ***MKCSAW#***

6. PUBLIC SEVERE THUNDERSTORM AND TORNADO WATCHES (0-6 h):
TEXT: ***MKCSEL#***

7. SPC CONVECTIVE WATCH COUNTY LISTING (0-6 h):
TEXT: ***MKCSEV#***

8. SPC RADAR CORNER POINT MESSAGE (updated twice hourly):
TEXT: ***MKCSEVMKC***

9 CONVECTIVE WATCH STATUS MESSAGE (0-3 h):
TEXT: ***MKCWWAMKC***

10. WATCH OUTLINE UPDATE MESSAGE (updated twice hourly):
TEXT: ***MKCWOU#***

11. HOURLY SEVERE WEATHER REPORT LISTING (updated hourly):
TEXT: ***MKCSTAHRY***

12. DAILY SEVERE WEATHER REPORT LISTING (updated daily):
TEXT: ***MKCSTADTS***

Product #1: **DAY 1 CONVECTIVE OUTLOOK (0-24 h)**
AFOS Product Category: **MKCSWODY1**
AFOS GRAPHICS: **94O**

Purpose:

The Day 1 Convective Outlook is a technical discussion, in plain language (except for universally understood contractions), describing expected convective activity across the CONUS for the 24 h period valid 12Z - 12Z of the issue day. The product also gives meteorological reasoning.

Intended Audience:

The Day 1 Convective Outlook is designed for meteorologists and other sophisticated consumers of weather information.

Brief Description:

The Day 1 Convective Outlook has two basic components: a description of the area where there exists a slight, moderate, or high risk of severe thunderstorms; and, a section on meteorological reasoning. The geographical section uses three-letter location identifiers to define end points that inscribe threat areas. Slight, moderate, and high risk areas are treated separately (terminology is currently under review and may be changed). An area of general thunderstorm threat similarly is identified. The meteorological reasoning section generally is one or two paragraphs in length, written in plain language except for compass directions and other universally understood contractions.

An AFOS graphic (94O) is provided with each Day 1 outlook. The graphic describes the area outlined in the Day 1 text (SPCSWODY1). An example is provided.

The Day 1 Convective Outlook is valid for a 24-h period valid 1200 UTC of the current day until 1200 UTC the following day. The Day 1 outlook is issued at 0600 UTC daily, with updates at 1100 UTC, 1600 UTC, 2000 UTC, and 0200 UTC. Issuance times may be changed based on customer feedback and demand.

Day One Convective Outlook (MKCSWODY1):

11/17/97

MKCSWODY1
ACUS01 KSPC 290621
SWODY1
SPC AC1 290621

CONVECTIVE OUTLOOK...REF AFOS NMCGPH94O.

VALID 291200Z - 301200Z

THERE IS A **MODERATE RISK** OF SEVERE THUNDERSTORMS TO THE RIGHT OF A LINE FROM MCW LSE VOK 30 SE OSH MKG AZO MIE BMG CGI 40 NE UNO 30 W TBN SZL P35 10 NE DSM MCW.

THERE IS A **SLIGHT RISK** OF SEVERE THUNDERSTORMS TO THE RIGHT OF A LINE FROM 20 E CSM 25 E P28 HUT SLN CNK OLU OTG MSP IMT ESC 25 ENE PLN 45 ESE OSC MFD CMH LEX BWG MEM PBF 45 ENE ACT ACT 25 SE BWD 30 NE SJT 45 W ABI 50 NE BGS 40 S CDS 20 E CSM.

GENERAL THUNDERSTORMS ARE FORECAST TO THE RIGHT OF A LINE FROM 65 SSW GDP 20 E CNM LBB 40 ESE AMA 55 W GAG 15 SE 1K5 15 NE CAO LVS ABQ GNT GUP 60 SSE U17 U17 4HV U28 50 WSW RWL CPR P05 PIR 50 SSE FAR HIB ELO 50 ENE ELO ...CONT... 20 WSW ERI YNG PKB 10 NNW JKL 35 NW MSL GWO 25 NW ESF 40 SSW CLL SAT DRT.

...SEVERE THUNDERSTORM FORECAST DISCUSSION...

--- SYNOPSIS ---
NO ETA MODEL DATA AVAILABLE FROM 29/00Z. HOWEVER...SYSTEM IS LIFTING OUT OF LONGWAVE POSITION SLIGHTLY FARTHER NORTH THAN PROGGED BY 28/12Z MODELS...AND THOUGH WELL INITIALIZED BY 29/00Z NGM...MAY TRACK LEFTWARD FROM ITS FORECAST. AS TROUGH LIFTS NORTHEASTWARD...STRONG DRY PUNCH AND LIFTING WILL OCCUR FROM NEAR SURFACE THROUGH MID LEVELS...AS COLD FRONT MOVES EASTWARD ACROSS OUTLOOK AREA. NORTHWARD MODEL BIAS HAS BEEN OBSERVED TO A MUCH GREATER DEGREE BEFORE WITH SIMILAR EJECTIONS OF SOUTHWESTERN CONUS CYCLONES...AND MODELS WERE VERY CONSISTENT WITH ONE ANOTHER...SO MODEL PERFORMANCE WITH THIS PATTERN SO FAR APPEARS REMARKABLY GOOD. THIS CONFIDENCE COMBINED WITH THE LATEST SATELLITE/RAOB TRENDS JUSTIFY ONLY MINOR ADJUSTMENTS TO PREVIOUS DAY 2 SEVERE THREAT AREAS.

--- MODERATE RISK AND ADJACENT PORTIONS OF MIDWEST ---
VAD/PROFILER DATA SHOWS 50-60 KT LLJ ALREADY UNDERWAY OVER WESTERN/NORTHWESTERN TX AND WESTERN OK...WHICH WILL SHIFT/SPREAD NORTHEASTWARD ACROSS KS/MO/IA BY BEGINNING OF PERIOD.

RESULTING STRONG LOW LEVEL THETA-E ADVECTION WILL AID DESTABILIZATION AND INCREASE VERTICAL SHEAR PROFILES BEFORE STRONGEST LIFT AND MID-LEVEL COOLING REACH REGION IN ADVANCE OF EJECTING MID/UPR LEVEL TROUGH. MODIFIED FORECAST SOUNDINGS SHOW NEARLY MOIST LAPSE RATES THROUGH A DEEP LAYER AHEAD OF DRY SLOT...CAPE RANGING FROM 500-1500 J/KG AND -1 TO -3 LI...AND INSTABILITY GENERALLY DECREASING WITH NORTHWARD EXTENT OVER MIDDLE MISSISSIPPI VALLEY AND GREAT LAKES REGION. DYNAMIC AND KINEMATIC SUPPORT ARE QUITE INTENSE. STRONG GRADIENT FLOW AT ALL LEVELS ASSOCIATED WITH TROUGH AND MARGINALLY SUFFICIENT DESTABILIZATION SHOULD YIELD A SIGNIFICANT CONVECTIVE WIND DAMAGE THREAT OVER MID/UPR MISSISSIPPI VALLEY AND PORTIONS OF SOUTHERN/WESTERN GREAT LAKES REGION. ALSO...PROGGED STORM-RELATIVE VERTICAL SHEAR PROFILES SUPPORT TORNADIC SUPERCELLS...BUT SCOPE AND LONGEVITY OF TORNADO THREAT IS STILL IN QUESTION DUE TO LIMITED INSTABILITY.

A PUBLIC SEVERE WEATHER OUTLOOK...UNDER AFOS HEADER PWOMKC...MAY BE REQUIRED LATER THIS MORNING IF DEVELOPMENT OF SEVERE THREAT PROCEEDS AS EXPECTED.

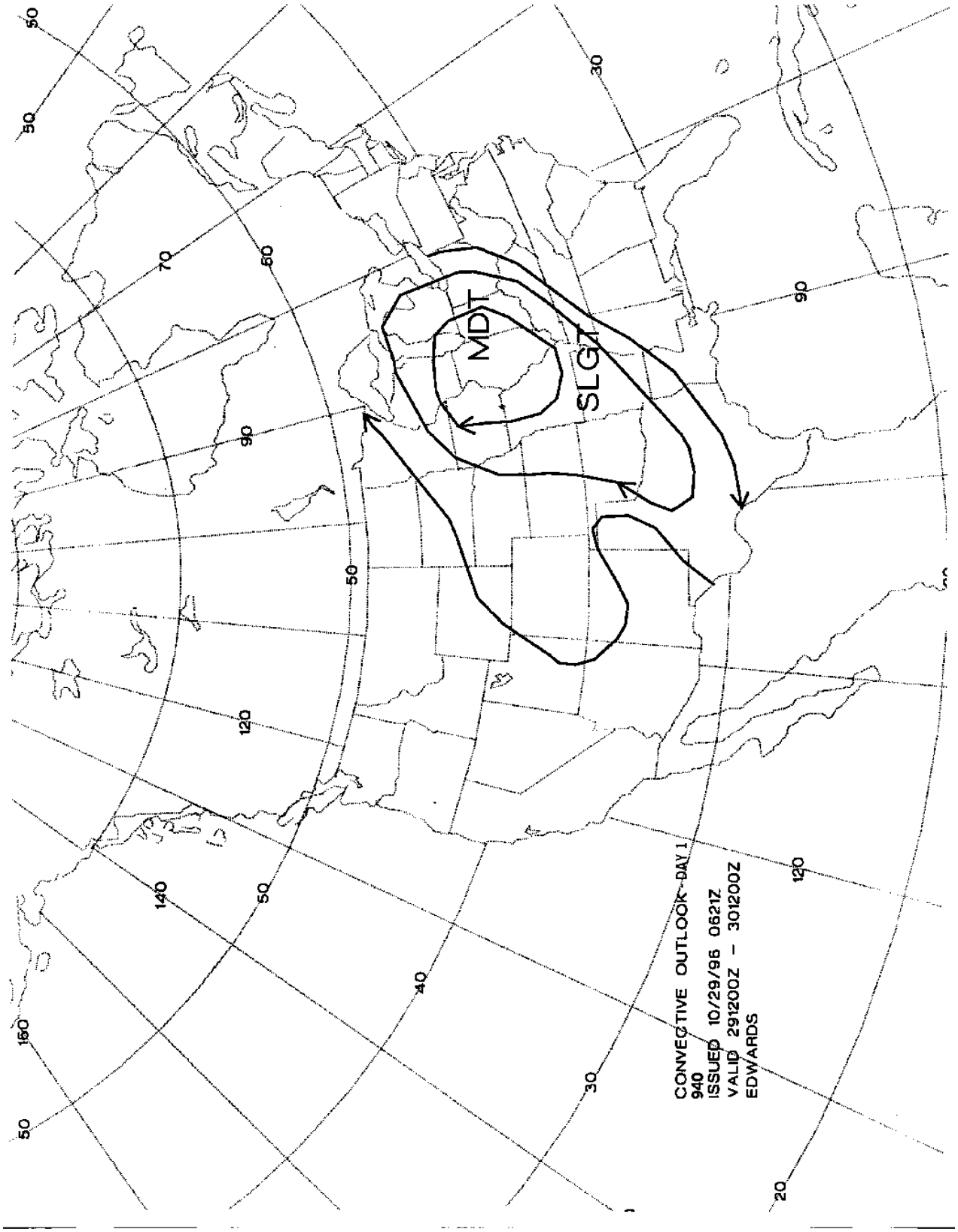
--- SOUTHERN/SOUTHWESTERN SLIGHT RISK...TX/OK/AR ---
STRONG...POSSIBLY SEVERE CONVECTION WILL BE ONGOING AT BEGINNING OF PERIOD OVER WESTERN PORTIONS OF THIS REGION...ALONG LEADING EDGE OF STRONGEST MID-LEVEL COLD ADVECTION AND DRY SLOT. SEVERE SQUALL LINE...POSSIBLY WITH A FEW EMBEDDED BOW ECHOES AND LEWPS PRODUCING DAMAGING WINDS...ARE POSSIBLE. THIS CONVECTION WILL MOVE EASTWARD AND NORTHEASTWARD ACROSS THE REGION DURING THIS MORNING AND EARLY AFTERNOON. ALTHOUGH LOW-LEVEL INSTABILITY WILL INCREASE OVER MUCH OF THIS AREA DURING THE AFTERNOON...THIS WILL BE COUNTERACTED SIGNIFICANTLY BY WEAKENING TRENDS IN DEEP-LAYER FLOW AND LAPSE RATES ALOFT AS TROUGH MOVES TO THE NORTH-NORTHEAST.

..EDWARDS.. 10/29/98

...GENERAL THUNDERSTORM FORECAST DISCUSSION...

--- CENTRAL ROCKIES AND ADJACENT HIGH PLAINS ---
WIDELY SCATTERED THUNDERSTORMS ARE POSSIBLE...PRIMARILY UNDER COLD CORE ASSOCIATED WITH MID/UPR LEVEL TROUGH. ACTIVITY SHOULD SHIFT FROM CENTRAL ROCKIES EARLY IN PERIOD ACROSS CENTRAL PLAINS IN CLOSE CORRELATION TO TRACK OF STRONGEST MID-LEVEL VORTICITY FIELD.

..EDWARDS.. 10/29/98


MDT
SLGT
CONVECTIVE OUTLOOK-DAY 1
940
ISSUED 10/29/96 0621Z
VALID 2912002 - 3012002
EDWARDS

GRAPHIC 94O

Product #2: **DAY 2 CONVECTIVE OUTLOOK (24-48 h)**
AFOS Product Category: **MKCSWODY2**
AFOS GRAPHICS: **98O**

Purpose:

The Day 2 Convective Outlook is a technical discussion, in plain language (except for universally understood contractions), describing expected convective activity across the CONUS for the 24-48 h period. The product also gives meteorological reasoning.

Intended Audience:

Meteorologists and other sophisticated consumers of weather information.

Brief Description:

The Day 2 Convective Outlook has two basic components: a description of areas where severe convection is expected (via slight, moderate, or high risk areas); and a section on meteorological reasoning. Areas of General Thunderstorms (non-severe) are also provided. The geographical section uses three-letter location identifiers to define end points that inscribe threat areas. Slight, moderate, and high risk areas are treated separately (terminology is currently under review and may be changed). The meteorological reasoning section generally is one or two paragraphs in length, written in plain language except for compass directions and other universally understood contractions.

An AFOS graphic (98O) is provided with each Day 2 Outlook. The graphic describes the area outlined in the Day 2 text (SPCSWODY2). An example is provided.

The Day 2 Convective Outlook is valid for the following convective day running from 1200 UTC on the following day until 1200 UTC the next day (24h forecast period). The Day 2 outlook is issued at 0730/0830 UTC (CDT/CST respectively) daily, with an update at 1800 UTC. Issuance time may be changed based on customer feedback and requests.

Day Two Convective Outlook (MKCSWODY2):

11/17/97

MKCSWODY2
ACUS02 KSPC 291737
SWODY2
SPC AC2 291737

2ND DAY SEVERE CONVECTIVE OUTLOOK...REF AFOS NMCGPH98O.

VALID 301200-311200

THERE IS A **SLIGHT RISK** OF SEVERE THUNDERSTORMS TO THE RIGHT OF A LINE FROM 20 NNE PBG PSF EWR NHK SHD MGW PIT ERI.

GENERAL THUNDERSTORMS ARE FORECAST TO THE RIGHT OF A LINE FROM LRD AUS SHV JAN TCL HSV LEX TOL APN ...CONT... GCC CYS DEN ALS FMN GCN P38 ENV 27U LVM.

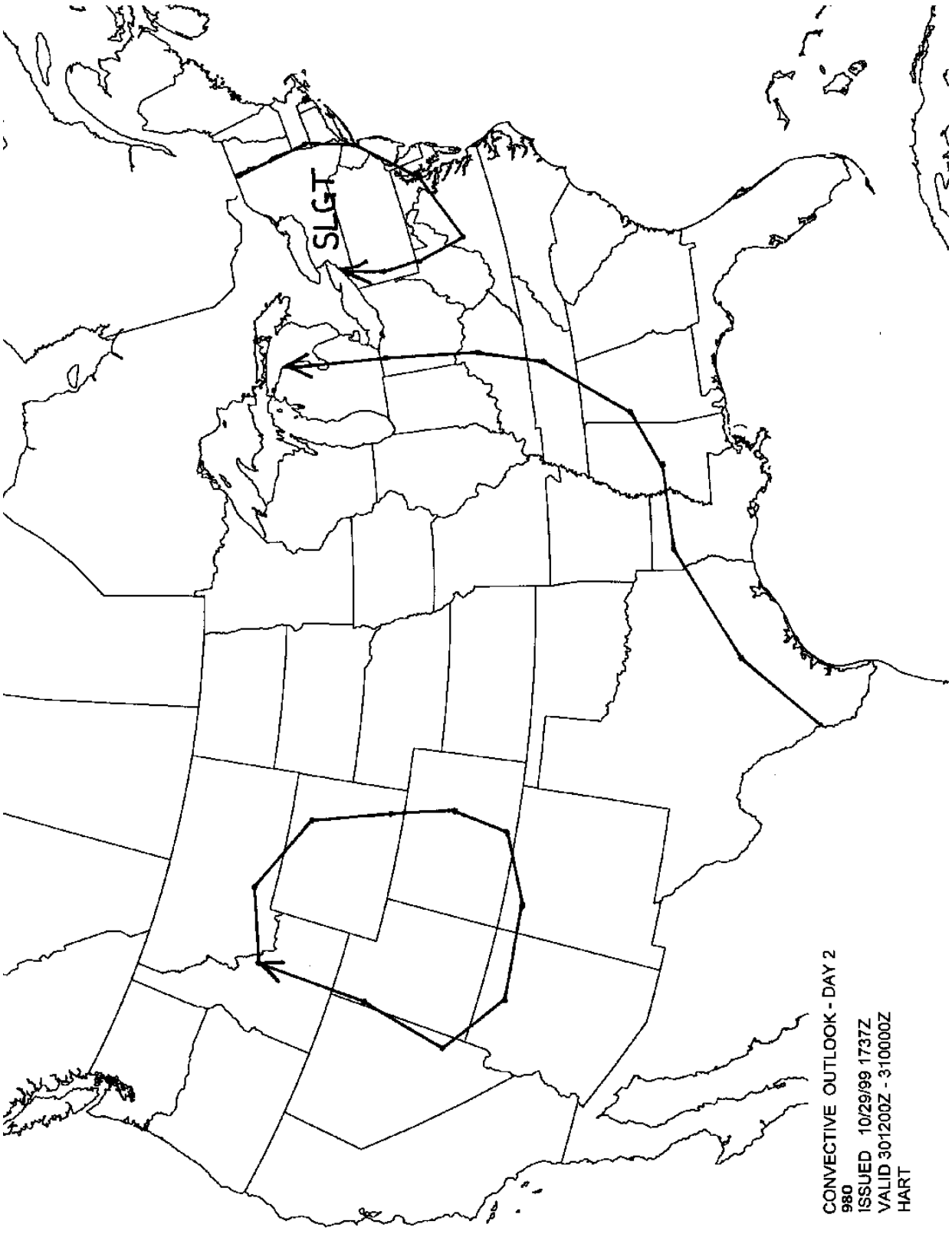
...SEVERE THUNDERSTORM FORECAST DISCUSSION...

...NY/PA/MD/NORTHERN VA...
VIGOROUS UPPER TROUGH CURRENTLY OVER THE CENTRAL PLAINS IS FORECAST TO SWEEP NORTHEASTWARD ACROSS THE GREAT LAKES REGION AND INTO SOUTHEASTERN CANADA ON WEDNESDAY. MEANWHILE...ASSOCIATED SURFACE COLD FRONT WILL EXTEND ACROSS WESTERN NY/PA AT BEGINNING OF PERIOD...MOVING INTO WESTERN NEW ENGLAND BY EVENING. ATMOSPHERE AHEAD OF FRONT IS FORECAST TO BE ONLY MARGINALLY UNSTABLE WITH LIFTED INDICES OF 0 TO -1. HOWEVER...90-100 KT WESTERLY MID-LEVEL WINDS AND STRONG CONVERGENCE ALONG FRONT SUGGESTS POTENTIAL FOR NARROW LINE OF LOW-TOPPED SHOWERS AND THUNDERSTORMS CAPABLE OF PRODUCING DAMAGING WINDS.

...GENERAL THUNDERSTORM FORECAST DISCUSSION...

...INTERMOUNTAIN WEST...
DIURNAL TSTMS ARE EXPECTED TO DEVELOP OVER THE HIGHER TERRAIN OF THE ROCKIES AND INTERMOUNTAIN REGION. STRONG SURFACE HEATING WILL RESULT IN STEEP LAPSE RATES OVER MOST OF THE AREA. SCATTERED PULSE TYPE / MULTI CELL THUNDERSTORMS ARE EXPECTED TO CONTINUE BEYOND 31/00Z.

..HART.. 10/29/98


SLGT
CONVECTIVE OUTLOOK - DAY 2
980
ISSUED 10/29/99 1737Z
VALID 301200Z - 310000Z
HART

GRAPHIC 98O

Product #3: **PUBLIC SEVERE WEATHER OUTLOOK (PWO)**
AFOS Product Category: **MKCPWOMKC**
AFOS GRAPHICS: **NONE**

Purpose:

The Public Severe Weather Outlook is a forecast of severe thunderstorms and/or tornadoes issued at the Lead Forecaster's discretion when a possible outbreak or major severe weather event is possible. The discussion is written in plain language (except for universally understood contractions), and is intended to encourage enhanced public awareness to possible dangerous and severe weather during the next 24 h period.

Intended Audience:

The Public Severe Weather Outlook is designed for the general public as well as other sophisticated consumers of weather information.

Brief Description:

The Public Severe Weather Outlook has two basic components: a description of the area where there exists a considerable threat of severe weather; and a brief discussion relating timing, expected evolution, areas affected, and basic meteorological reasoning. This text product is written in plain language except for compass directions and other universally understood contractions. Sophisticated users can access additional meteorological information regarding the anticipated event using standard SPC outlook products (SWODY1, etc.).

The PWO is issued on an as needed basis, typically when a major severe weather event or outbreak of severe thunderstorms and/or tornadoes is expected. Initial issuance is typically before 1600 UTC on the day of the event.

Public Severe Weather Outlook (MKCPWOMKC):

11/17/97

MKCPWOMKC
WWUS36 KSPC 290621
PUBLIC SEVERE WEATHER OUTLOOK
STORM PREDICTION CENTER NORMAN OK
1100 AM CDT SATURDAY OCTOBER 25 1997

...OUTBREAK OF TORNADOES AND SEVERE THUNDERSTORMS EXPECTED ACROSS PARTS OF THE SOUTHERN PLAINS...THE WESTERN AND CENTRAL GULF COAST REGION AND THE LOWER MISSISSIPPI VALLEY THIS AFTERNOON AND TONIGHT...

THE STORM PREDICTION CENTER IN NORMAN OKLAHOMA IS FORECASTING AN OUTBREAK OF TORNADOES AND SEVERE THUNDERSTORMS ACROSS EASTERN PARTS OF THE SOUTHERN PLAINS...THE WESTERN AND CENTRAL GULF COAST STATES AND THE LOWER MISSISSIPPI VALLEY THIS AFTERNOON THROUGH TONIGHT. THE AREAS MOST LIKELY TO EXPERIENCE TORNADOES...DAMAGING WINDS...AND LARGE HAIL INCLUDE:

> NORTHERN AND EASTERN TEXAS...SOUTHEAST OKLAHOMA...CENTRAL AND SOUTHERN ARKANSAS...WESTERN MISSISSIPPI AND MOST OF LOUISIANA.

OTHER SEVERE THUNDERSTORMS ARE POSSIBLE OVER THE REMAINDER OF OKLAHOMA... NORTHERN ARKANSAS...EASTERN MISSISSIPPI... ALABAMA... TENNESSEE... AND THE FLORIDA PANHANDLE.

A LOW PRESSURE SYSTEM WILL STRENGTHEN OVER OKLAHOMA THROUGH THIS AFTERNOON BEFORE ADVANCING INTO ARKANSAS LATER TONIGHT. EAST OF THE LOW...WARM MOIST GULF AIR WILL CONTINUE TO SURGE NORTHWARD ON STRONG SOUTHERLY WINDS. MEANWHILE... A COLD FRONT AND ITS ASSOCIATED BAND OF VERY STRONG UPPER LEVEL WINDS WILL SWEEP EAST INTO CENTRAL TEXAS AND OKLAHOMA THIS AFTERNOON BEFORE CONTINUING EAST INTO ARKANSAS AND LOUISIANA TONIGHT. AS THE COLD DRY AIR BEHIND THE FRONT CONVERGES WITH THE VERY WARM AND MOIST AIR TO ITS EAST...VIOLENT THUNDERSTORMS WILL ERUPT. WITH WIND SPEEDS OVER 120 MILES PER HOUR IN THE UPPER LEVELS OF THE ATMOSPHERE...THE POTENTIAL WILL EXIST FOR NUMEROUS SEVERE THUNDERSTORMS AND TORNADOES...SOME OF WHICH MAY BE VIOLENT.

PERSONS IN THE THREATENED AREAS ARE URGED TO REVIEW SEVERE WEATHER SAFETY RULES...AND LISTEN TO RADIO...TV...OR NOAA WEATHER RADIO FOR LATER STATEMENTS AND POSSIBLE WATCHES AND WARNINGS.

...STEPHEN CORFIDI...
STORM PREDICTION CENTER

Product #4: **Mesoscale Discussion (MCD)**
AFOS Product Category: **MKCSWOMCD**
AFOS Graphic: **None**

Purpose:

The Mesoscale Discussion is a short-term technical product written in plain language (with universally understood contractions) that communicates the current judgment of SPC regarding the potential for hazardous weather on the mesoscale (convection, winter weather, etc.) The forecast duration of this product is 0-3 h for convective phenomena and 0-9 h for winter weather (primary focus in winter weather is 0-6h). This product will expand it's content including information on a variety of mesoscale phenomena.

Intended Audience:

The MCD is intended for meteorologists and other knowledgeable customers.

Brief Description:

The MCD is a brief product (generally less than 25 lines of narrative). It is a terse, technical discussion aimed at describing convective or hazardous weather potential for the next several hours. The end points of a polygon around the area of threat are provided at the top and bottom of the product. The state UGC code is provided in the header of the product.

MESOSCALE DISCUSSION (MCD):

11/17/97

MKCSWOMCD ALL;283,0947 283,1009 322,0947 322,1009;
ACUS03 KSPC 251748
SPC MCD 251748
TXZ000-252300-

SPC MESOSCALE DISCUSSION #234 FOR... SOUTHEASTERN TEXAS
CONCERNING...SEVERE THUNDERSTORM POTENTIAL...

CONVECTION CONTINUES TO SLOWLY INCREASE OVER PARTS OF SOUTHEASTERN TEXAS AND ADJACENT GULF WATERS OVER THE PAST FEW HOURS. WAVE IMAGERY INDICATED A SHORT WAVE TROUGH WITH ASSOCIATED DRY MID LEVEL AIRMASS WAS NEARING THE TEXAS COASTAL BEND AT THIS MOMENT...WHERE THE AIRMASS HAD BECOME MODERATELY UNSTABLE. CURRENT SURFACE BASED LIFTED INDICES RANGED FROM -3 TO -6. LATEST DOPPLER IMAGERY FROM CORPUS CHRISTI AND HOUSTON-GALVESTON INDICATED ACTIVITY NEARING THE TEXAS COAST SOUTHEAST OF MATAGORDA COUNTY HAS PERSISTENT WEAK MID LEVEL ROTATION. CURRENT VAD WIND PROFILES SUPPORT EARLIER MODELS IN INCREASING UPPER LEVEL SOUTHWESTERLY FLOW ASSOCIATED WITH SHORT WAVE WHICH WILL LIKEWISE INCREASE DEEP LAYER SHEAR ACROSS THIS REGION OVER THE NEXT SEVERAL HOURS.

WARM FRONT LOCATED ACROSS SOUTHERN TEXAS/NORTHWESTERN GULF OF MEXICO SHOULD LIFT NORTHWARD THIS AFTERNOON...WHILE NUMEROUS MESOSCALE COASTAL/OUTFLOW BOUNDARIES PERSIST ACROSS THIS AREA. THIS SHOULD ALLOW CONVECTION TO BECOME NEAR SURFACE BASED...INCREASING POTENTIAL FOR ISOLATED TORNADOES.

IF THUNDERSTORMS CONTINUE TO INCREASE...A WEATHER WATCH MAY BE NEEDED IN THE NEXT HOUR OR SO.

FOR GRAPHICAL REPRESENTATION OF THE DISCUSSION AREA, SEE INTERNET GRAPHIC: *http://www.nssl.noaa.gov/~spc/products/meso/*

..EVANS.. 10/25/98

;303,1009 311,0965 322,0947 315,0947 302,0947 283,1009;
NNNN

Product #5: **Aviation Weather Watch (SAW)**
AFOS Product Category: **MKCSAW(0-9)**
AFOS GRAPHICS: **None**

Purpose:

To provide brief, specific information regarding the issuance of a SEVERE THUNDERSTORM or TORNADO watch. This product is primariarly used by the aviation community.

Intended Audience:

NWS Forecast Offices, other National Centers, and commercial weather information consumers (especially aviation interests)

Brief Description:

The SAW is a terse description of a convective watch. It supplies the reader with the weather watch number, the type of watch (tornado or severe thunderstorm), the states involved, valid times, and in particular the 6-end points that circumscribe the watch area. Those end points are provided both in aviation coordinates and latitude/longitude. In addition, the reader is given specific elements expected with the severe weather: hail size, thunderstorm wind gusts, mean storm motion vector, and maximum thunderstorm tops. The reader is then directed to the public watch narrative (MKCSEL#) for further details.

AVIATION WEATHER WATCH (SAW)

11/17/97

MKCSAW2 ALL 270100;323,0918 323,0953 355,0918 355,0953;
WWUS40 KSPC 261705
SPC AWW 261705

WW #1002 TORNADO TX AR LA 261730Z - 270100Z
AVIATION COORDS..38WNW GGG..35NW TXK..5W FSM..59NNE LIT..23N MLU..39SW MLU..38WNW GGG
HAIL SURFACE AND ALOFT..2 INCHES. WIND GUSTS..60 KNOTS. MAX TOPS..550. MEAN STORM MOTION VECTOR..25040.

FOR FURTHER DETAILS ... REFER TO MKCSEL2.

;328,0953 339,0944 355,0944 354,0918 329,0920 323,0928;
NNNN

Product #6: **Public Watch Narrative**
AFOS Product Category: **MKCSEL(0-9)**
AFOS GRAPHICS: **None**

Purpose:

The SEL announces that there is a threat for severe thunderstorms and/or tornadoes in or near a defined area during a prescribed interval of time. It identifies whether the threat is of severe thunderstorms or tornadoes.

Intended Audience:

The SEL is designed for use by all members of the community including the public.

Brief Description:

The SEL is structured to provide a variety of information, both technical and non-technical, in a plain-language narrative of 6 paragraphs. At the beginning and end of the product, end points to a six-sided polygon are listed as latitude/longitude couplets. The polygon inscribes the area of greatest threat (the dual listing gives multiple customers computer coding flexibility).

The first paragraph of the narrative gives a general description of what the threat is and where it is, geographically. It also provides the valid time of the watch, and then gives enhanced wording if the situation is particularly dangerous.

Four paragraphs that follow supply the reader with more specific details about expected conditions. The first of these gives potential hail size, maximum wind speeds in thunderstorm wind gusts, threat for dangerous lightning, and recommended preparedness procedures. The next paragraph is preceded with the phrase "OTHER WATCH INFORMATION" and lists all active convective watches as well as whether this watch is replacing a previously issued watch. The next paragraph is preceded by the term "DISCUSSION" and is a technical synopsis of the meteorological conditions leading to the threat. The last of these three paragraphs is preceded by the term "AVIATION" and pertains to specific aviation related data.

The final paragraph refers the reader to statements from WFOs that list counties included in the watch.

SPC PUBLIC WATCH NARRATIVE (SEL)
11/17/97

MKCSEL2 ALL 270100;323,0918 323,0953 355,0918 355,0953;
WWUS09 KSPC 261705
SPC WW 261705
TXZ000-ARZ000-LAZ000-270100-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH #1002
STORM PREDICTION CENTER NORMAN OK
1205 PM CDT SUN MAY 26 1998

THE STORM PREDICTION CENTER HAS ISSUED A
TORNADO WATCH FOR PORTIONS OF:

NORTHEASTERN TEXAS
NORTHERN LOUISIANA
ARKANSAS

EFFECTIVE THIS SUNDAY AFTERNOON AND EVENING FROM 1230 PM UNTIL 7 PM CDT.

{*option for enhanced wording to describe particularly dangerous situation*}

THE TORNADO WATCH AREA IS DEFINED TO THE RIGHT OF A LINE FROM 75 WNW OF SHREVEPORT, LA...TO 40 NW OF TEXARKANA, AR...T0 5 W OF FORT SMITH, AR...TO 45 NNE OF LITTLE ROCK, AR...45 ESE OF EL DORADO, AR...TO 60 E OF SHREVEPORT, LA...TO 75 WNW OF SHREVEPORT, LA.

A TORNADO WATCH MEANS CONDITIONS ARE FAVORABLE FOR SEVERE THUNDERSTORMS AND TORNADOES IN AND CLOSE TO THE WATCH AREA. THUNDERSTORMS IN THE WATCH AREA ALSO MAY PRODUCE HAIL UP TO 2 INCHES IN DIAMETER...DAMAGING WIND GUSTS TO 70 MPH... AND DANGEROUS LIGHTNING {*text variable according to situation*}. PERSONS IN THESE AREAS SHOULD BE ON THE LOOKOUT FOR THREATENING WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE WARNINGS.

OTHER WATCH INFORMATION...THIS TORNADO WATCH REPLACES SEVERE THUNDERSTORM WATCH NUMBER 1000. WATCH NUMBER 1000 WILL NOT BE IN EFFECT AFTER 1 PM CDT. CONTINUE WW 999..WW 1001..{*optional according to situation*}

DISCUSSION ... RAPID THUNDERSTORM DEVELOPMENT IN NORTHEAST TEXAS EXPECTED TO CONTINUE IN AXIS OF BEST SURFACE CONVERGENCE AND INSTABILITY. THUNDERSTORMS EXPECTED TO BUILD NORTH AND MOVE EAST SOUTHEAST ACROSS DEW POINT AXIS IN RESPONSE TO WEAK UPPER LEVEL IMPULSE. AIR MASS UNSTABLE WITH LIFTED INDICES OF MINUS 10. FAVORABLE VERTICAL WIND PROFILE WILL SUPPORT ISOLATED SUPERCELLS WITH POSSIBLE TORNADOES.

AVIATION ... A FEW SEVERE THUNDERSTORMS AND TORNADOES WITH HAIL SURFACE AND ALOFT TO 2 INCHES ... EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 60 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 550. MEAN STORM MOTION VECTOR 25040.

...GALWAY

;328,0953 339,0944 355,0944 354,0918 329,0920 323,0928;
NNNN

Product #7 **SPC Convective Watch County Listing (SEV)**
AFOS Product Category: **MKCSEV(0-9)**
AFOS GRAPHIC: **None**

Purpose:

To provide a listing of counties included in a SEVERE THUNDERSTORM or TORNADO watch for NWS Forecast Offices and other National Centers.

Intended Audience:

NWS

Brief Description:

The SEV Consists of three principal components: watch identification, counties included (sorted by state), and watch end points. The watch identification is in the product header, stating the type of watch, its watch number and its expiration time. The county listing is an alphabetical listing of counties, by state. The last entry is the polygon end points, in latitude/longitude.

This product will be used by ZIP and ICWF software packages to generate WFO/WCN products.

SPC CONVECTIVE WATCH COUNTY LISTING (SEV):

11/17/97

MKCSEV2 ALL 270100;323,0918 323,0953 355,0918 355,0953;
WOUS51 KSPC 261705
SPC WWC 261705

.TORNADO WATCH #1002 HAS BEEN ISSUED BY THE STORM PREDICTION CENTER EFFECTIVE THIS SUNDAY AFTERNOON AND EVENING FROM 12:30 PM UNTIL 7:00 PM CDT.
$$

AR
. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	CONWAY
DALLAS	FAULKNER	GARLAND
GRANT	HEMPSTEAD	HOT SPRING
HOWARD	JEFFERSON	LAFAYETTE
LITTLE RIVER	LOGAN	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEBASTIAN	SEVIER
UNION	WHITE	YELL

$$

LA
. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		

$$

TX
. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		

$$

;328,0953 339,0944 355,0944 354,0918 329,0920 323,0928;
NNNN

Product #8 **SPC Watch Point Information (SEV)**
AFOS Product Category: **MKCSEVMKC**
AFOS GRAPHIC: **None**

Purpose:

To provide a listing of all active severe thunderstorm and/or tornado watches in effect.

Intended Audience:

NWS/NCO for display of active watches on the radar chart.

Brief Description:

The MKCSEVMKC provides a brief listing of the type of watch, watch number, expiration time and latitude/longitude locations of 6 vertices which describe the watch area.

This product is primariarly used by NCO to produce current watch polygons on the radar chart.

SPC WATCH POINT INFORMATION MESSAGE (MKCSEVMKC):

11/17/97

MKCSEVMKC
WOUS50 KSPC 261801
FILE CREATED 26-NOV-97 AT 17:05:03 UTC

SEVR 971126 1801 WT0792 2300
02903.09250 03135.09136 03135.08822 02903.08941;

SEVR 971126 1801 WT0793 0000
02957.08911 03248.08751 03248.08456 02957.08621;

Product #9: **Convective Watch Status Message (0-3 h)**
AFOS Product Category: **MKCWWAMKC**
AFOS GRAPHIC: **None**

Purpose:

To give an assessment of convective development within a convective watch.

Intended Audience:

Meteorologists and other knowledgeable customers.

Brief Description:

The Status Message is a brief, terse, plain language technical discussion, two to three paragraphs in length. The WWA consists of a brief nowcast, a short term forecast, and an assessment of what will be done with the watch (and if further watches are anticipated or will be required). At the top of the product, the watch polygon end points are provided. The state UGC code is provided in the header of the product.

SPC WATCH STATUS MESSAGE (WWA):

11/17/97

MKCWWAMKC ALL 270100;0323,0918 0355,0953 0355,0918 0323,0953
NWUS08 KSPC 262305
SPC WWA 262305
TXZ000-ARZ000-LAZ000-270100-

STATUS REPORT ON WW #1002
THREAT AREA...75SW TXK..35NW TXK..75WNW HOT..25NE LIT..45SE ELD..45ESE SHV..75 SW TXK
LAT/LONG COORDS...328,0953 339,0944 350,0944 350,0918 329,0920 323,0928

SUPERCELLS DEVELOPING IN NORTHEASTERN TEXAS CONTINUE HEADING 250/16 KT TOWARD SOUTHWESTERN ARKANSAS AND NORTHWESTERN LOUISIANA. RECENT VOLUME SCANS HAVE SHOWN STRONG AND INCREASING MID-LEVEL ROTATIONAL VELOCITIES WITH THESE STORMS AND A TORNADO WAS REPORTED IN BOWIE COUNTY IN THE PAST HOUR.

APPEARS THAT THE SEVERE WEATHER THREAT FOR THE NEXT SEVERAL HOURS WILL BE CONFINED TO EXTREME NORTHEASTERN TX...SOUTHERN AR...AND NORTHERN LA. WARM FRONTAL BOUNDARY NOT EXPECTED TO PUSH MUCH FARTHER NORTH OVER ARKANSAS THIS AFTERNOON. ENHANCED SURFACE COOL POCKET DUE TO EFFECTS OF PREVIOUS CONVECTION AND FRONTOGENESIS OVER WESTERN LA WILL KEEP BEST INSTABILITY CONFINED TO THESE AREAS.

WEATHER WATCH WILL CONTINUE THROUGH 0100 UTC EXPIRATION TIME. WARM SECTOR WILL BE CLOSELY MONITORED DURING REST OF THE EVENING FOR SIGNS OF EASTWARD ADVANCEMENT.

..CRAVEN.. 5/26/98

NNNN

Product #10: **Watch Outline Update Message (WOU)**
AFOS Product Category: **MKCWOU#**
AFOS GRAPHICS: **None**

Purpose:

To provide NCO and other users with updated and current outlines of convective watches as provided by WFOs.

Intended Audience:

NCO and other knowledgable customers.

Brief Description:

The Watch Outline Update Message (WOU) is a brief, non-technical product which provides information regarding areas currently affected by an active convective watch. The watch number, type of watch, and location of 6-vertices outlining the area are provided. Locations of the watch polygon end points (6 points) are given in lat/long pairs as well as aviation coordinates. A list of all counties sorted by state, are also provided along with a UGC header. This product is scheduled to be automatically generated at T+20 and T+50 after the hour whenever active convective watches are in effect. Individual WOU products will be issued for each active convective watch.

WATCH OUTLINE UPDATE MESSAGE (WOU):

11/17/97

MKCWOU2 ALL 270100;323,0918 355,0953 355,0918 323,0953;
WOUS52 KSPC 262320
SPC WOU 262320

WW #1002 TORNADO WATCH OUTLINE UPDATE
AVIATION COORDS..38WNW GGG..35NW TXK..20S FSM..27NE LIT..23N MLU..39SW MLU..38WNW GGG

AS OF 5:20 PM CDT...TORNADO WATCH #1002 REMAINS IN EFFECT UNTIL 7:00 PM CDT FOR THE FOLLOWING LOCATIONS:

$$
ARC011-013-019-025-027-039-051-053-057-059-061-069-073-081-085-091-097-099-103-105-109-113-119-125-127-133-139-149-LAC013-015-017-027-061-111-119-TXC037-063-067-203-315-343-459-270100-

AR
. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	DALLAS
GARLAND	GRANT	HEMPSTEAD
HOT SPRING	HOWARD	JEFFERSON
LAFAYETTE	LITTLE RIVER	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEVIER	UNION
YELL		

$$

LA
. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		

$$

TX
. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		

$$

;328,0953 339,0944 350,0944 350,0918 329,0920 323,0928;

NNNN

Product #11: **Hourly Severe Weather Report Listing**
AFOS Product Category: **MKCSTAHRY**
AFOS GRAPHICS: **-------**

Purpose:

To provide interested users with an hourly updated list of severe weather reports received at the Storm Prediction Center each day (12 UTC - 1159 UTC).

Intended Audience:

NWS Forecast Offices, media, and other knowledgable customers.

Brief Description:

The Hourly Severe Weather Report Listing provides a compilation of severe weather reports (including tornadoes, large hail and damaging wind) received at the Storm Prediction Center each hour. New reports are appended to previous products. The period of record runs from 1200 UTC until 1159 UTC daily and is updated at the top of the hour.

HOURLY SEVERE WEATHER REPORT (MKCSTAHRY)

11/17/97

MKCSTAHRY
NWUS60 KSPC 200501
STAHRY

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICAITON 'STORM DATA'
FOR 06CST WED NOV 19 1997 THRU 23CST WED NOV 19 1997

	EVENT	LOCATION	REMARKS	(CST) TIME

.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....

NONE REPORTED

.....LRG HAIL / STRONG WIND RPTS.....LRG HAIL / STRONG WIND RPTS.....

1	WNDG	DOUGLAS COUNTY NV	(18 ESE TVL)	19/1315
		TREE DOWN ON US50	RNO/LSR	388311974

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....

NONE REPORTED

Product #12: **Daily Severe Weather Report Listing**
AFOS Product Category: **MKCSTADTS**
AFOS GRAPHICS: **-------**

Purpose:

To provide interested users a list of severe weather reports received at the Storm Prediction Center between 12 UTC - 1159 UTC each day.

Intended Audience:

NWS Forecast Offices, media, and other knowledgable customers.

Brief Description:

The Daily Severe Weather Report Listing provides a compilation of severe weather reports (including tornadoes, large hail and damaging wind) received at the Storm Prediction Center each day. The period of record runs from 1200 UTC until 1159 UTC daily. The product is produced at 1200 UTC daily.

DAILY SEVERE WEATHER REPORT (MKCSTADTS)

11/17/97

MKCSTADTS
NWUS61 KSPC 201215
STADTS

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICAITON 'STORM DATA'
FOR 06CST WED NOV 19 1997 THRU 06CST THU NOV 20 1997

EVENT	LOCATION	REMARKS	(CST) TIME

.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....

NONE REPORTED

.....LRG HAIL / STRONG WIND RPTS.....LRG HAIL / STRONG WIND RPTS.....

1	WNDG	DOUGLAS COUNTY NV	(18 ESE TVL)	19/1315
		TREE DOWN ON US50	RNO/LSR	388311974

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....

NONE REPORTED

Appendix B
PHASE II PRODUCTS

PART 1: WFO ALPHANUMERIC/GRAPHICAL/IMAGE PRODUCTS

The cluster of WFOs that participate in Phase II of the Convective Watch Decentralization will be using the IFPS capabilities of AWIPS. The remander of WFOs will continue to use the ZIP or PC Now software from Phase I.

WATCH COUNTY NOTIFICATION (WCN):

The WFO WCN Alphanumeric suite remains identical to the Phase I product suite except for the purpose of "issuing" the issuing site's name will be added into the first sentence of the text product. The graphic or image suite of products requires definition. This definition will be accomplished in the Spring of 1998.

WATCH STATUS REPORT (WWA): Alphanumeric/Graphic or Image

Purpose:

WFOs use these product to inform the public and private sectors as to the dispostition of all Watches, Warnings and Advisories within the WFOs CWA.

Intended Audience:

Public and private meteorologist and other sophisticated users.

Description:

A suite of alphanumeric and graphic/image products that summarize the current disposition of watches and warnings across a WFOs CWA.

Note: This product should look very much like the "Status Area Weather Update" the format has been defined for the alphanumeric product but the image/graphic product needs to be defined during the Spring of 1998.

Part 2, SPC PHASE II ALPHANUMERIC AND GRAPHIC PRODUCTS

Upon the complete implementation and approval of Phase I of watch decentralization (watch-by-county phase), the second phase will be implemented with a rather significant change to product type, content, format, and coordination.

The proposed SPC alphanumeric and graphical product formats are provided for Phase II of Convective Watch Decentralization.

These products include:

1. DAY 1 CONVECTIVE OUTLOOK (0-24 h):
TEXT: ***SPCSWODY1***
GRAPHICS: ***DY1SWO1, DY1SWO2, DY1SWO3, DY1SWO4***

2. DAY 2 CONVECTIVE OUTLOOK (24-48 h):
TEXT: ***SPCSWODY2***
GRAPHICS: ***DY2SWO1, DY2SWO2***

3. PUBLIC SEVERE WEATHER OUTLOOK (as needed):
TEXT: ***SPCPWOSPC***

4. MESOSCALE DISCUSSION (0-3 h - convection; 0-9 h - winter weather):
TEXT: ***SPCSWOMCD***
GRAPHIC: ***SPCMCDGPH***

5. GUIDANCE CONVECTIVE WATCH (0-6 h):
TEXT: ***SPCSEVCCC***

6. GUIDANCE WATCH OUTLINE (0-6 h):
GRAPHIC: ***SPCGWO#***

7. WATCH OUTLINE UPDATE MESSAGE (updated twice hourly):
TEXT: ***SPCWOUSPC***

8. HOURLY SEVERE WEATHER REPORT LISTING (updated hourly):
TEXT: ***SPCSTAHRY***

9. DAILY SEVERE WEATHER REPORT LISTING (updated daily):
TEXT: ***SPCSTADTS***

SPC PHASE II PRODUCTS:
11/20/97

Product #1: **DAY 1 CONVECTIVE OUTLOOK**
Product Category: **SPCSWODY1**
Associated Graphics: **DY1SWO1, DY1SWO2, DY1SWO3, DY1SWO4**

Purpose:

The Day 1 Convective Outlook is a technical discussion, in plain language (except for universally understood contractions), describing expected convective activity across the CONUS for the next 24 h. The product also gives meteorological reasoning.

Intended Audience:

Meteorologists and other sophisticated consumers of weather information.

Brief Description:

The Day 1 Convective Outlook has two basic components: a description of areas where severe convection is expected (via slight, moderate, or high risk areas OR a probabilistic approach); and a section on meteorological reasoning. The geographical section uses three-letter location identifiers to define end points that inscribe threat areas. Slight, moderate, and high risk (or probabilistic) areas are treated separately (terminology will likely be modified by Phase II to reflect better assessment of severe convective therat areas). Areas of general (non-severe) thunderstorms are also outlooked. The meteorological reasoning section generally is one or two paragraphs in length, written in plain language except for compass directions and other universally understood contractions.

The Day 1 Convective Outlook is valid for the 0-24 hour period and contains four forecasts of six hour duration through the period (i.e., 0-6 hr, 6-12 hr, 12-18 hr, and 18-24 hr). The outlook will be updated and released every six hours (four times daily; schedule to be determined).

DAY 1 CONVECTIVE OUTLOOK (SPCSWODY1)

8/25/97

SPCSWODY1
ACUS01 KSPC 290621
SWODY1
SPC AC1 290621

DAY 1 - CONVECTIVE OUTLOOK

--- SYNOPSIS ---
NO ETA MODEL DATA AVAILABLE FROM 29/00Z. HOWEVER...SYSTEM IS LIFTING OUT OF LONGWAVE POSITION SLIGHTLY FARTHER NORTH THAN PROGGED BY 28/12Z MODELS...AND THOUGH WELL INITIALIZED BY 29/00Z NGM...MAY TRACK LEFTWARD FROM ITS FORECAST. AS TROUGH LIFTS NORTHEASTWARD...STRONG DRY PUNCH AND LIFTING WILL OCCUR FROM NEAR SURFACE THROUGH MID LEVELS...AS COLD FRONT MOVES EASTWARD ACROSS OUTLOOK AREA. NORTHWARD MODEL BIAS HAS BEEN OBSERVED TO A MUCH GREATER DEGREE BEFORE WITH SIMILAR EJECTIONS OF SOUTHWESTERN CONUS CYCLONES...AND MODELS WERE VERY CONSISTENT WITH ONE ANOTHER...SO MODEL PERFORMANCE WITH THIS PATTERN SO FAR APPEARS REMARKABLY GOOD. THIS CONFIDENCE COMBINED WITH THE LATEST SATELLITE/RAOB TRENDS JUSTIFY ONLY MINOR ADJUSTMENTS TO PREVIOUS DAY 2 SEVERE THREAT AREAS.

VALID 291200Z - 291800Z REF AFOS DY1SCO1

THERE IS A **MODERATE RISK OF SEVERE THUNDERSTORMS** TO THE RIGHT OF A LINE FROM MCW LSE VOK 30 SE OSH MKG AZO MIE BMG CGI 40 NE UNO 30 W TBN SZL P35 10 NE DSM MCW.

THERE IS A **SLIGHT RISK OF SEVERE THUNDERSTORMS** TO THE RIGHT OF A LINE FROM 20 E CSM 25 E P28 HUT SLN CNK OLU OTG MSP IMT ESC 25 ENE PLN 45 ESE OSC MFD CMH LEX BWG MEM PBF 45 ENE ACT ACT 25 SE BWD 30 NE SJT 45 W ABI 50 NE BGS 40 S CDS 20 E CSM.

GENERAL THUNDERSTORMS ARE FORECAST TO THE RIGHT OF A LINE FROM 30 S P07 LBB DDC BBW ATY 10 N DM5...CONT... BUF EWR...CONT... ILM AGS TOI GPT ...CONT...YUM IGM GCN CEZ ABQ ELP.

...SEVERE THUNDERSTORM FORECAST DISCUSSION...

--- MODERATE RISK AND ADJACENT PORTIONS OF MIDWEST ---
VAD/PROFILER DATA SHOWS 50-60 KT LLJ ALREADY UNDERWAY OVER WESTERN/NORTHWESTERN TX AND WESTERN OK...WHICH WILL SHIFT/SPREAD NORTHEASTWARD ACROSS KS/MO/IA BY BEGINNING OF PERIOD.

RESULTING STRONG LOW LEVEL THETA-E ADVECTION WILL AID DESTABILIZATION AND INCREASE VERTICAL SHEAR PROFILES BEFORE STRONGEST LIFT AND MID-LEVEL COOLING REACH REGION IN ADVANCE OF EJECTING MID/UPR LEVEL TROUGH. MODIFIED FORECAST SOUNDINGS SHOW NEARLY MOIST LAPSE RATES THROUGH A DEEP LAYER AHEAD OF DRY SLOT...CAPE RANGING FROM 500-1500 J/KG AND -1 TO -3 LI...AND INSTABILITY GENERALLY DECREASING WITH NORTHWARD EXTENT OVER MIDDLE MISSISSIPPI VALLEY AND GREAT LAKES REGION. DYNAMIC AND KINEMATIC SUPPORT ARE QUITE INTENSE. STRONG GRADIENT FLOW AT ALL LEVELS ASSOCIATED WITH TROUGH AND MARGINALLY SUFFICIENT DESTABILIZATION SHOULD YIELD A SIGNIFICANT CONVECTIVE WIND DAMAGE THREAT OVER MID/UPR MISSISSIPPI VALLEY AND PORTIONS OF SOUTHERN/WESTERN GREAT LAKES REGION. ALSO...PROGGED STORM-RELATIVE VERTICAL SHEAR PROFILES SUPPORT TORNADIC SUPERCELLS...BUT SCOPE AND LONGEVITY OF TORNADO THREAT IS STILL IN QUESTION DUE TO LIMITED INSTABILITY.

A PUBLIC SEVERE WEATHER OUTLOOK...UNDER AFOS HEADER PWOMKC...MAY BE REQUIRED LATER THIS MORNING IF DEVELOPMENT OF SEVERE THREAT PROCEEDS AS EXPECTED.

--- SOUTHERN/SOUTHWESTERN SLIGHT RISK...TX/OK/AR ---
STRONG...POSSIBLY SEVERE CONVECTION WILL BE ONGOING AT BEGINNING OF PERIOD OVER WESTERN PORTIONS OF THIS REGION...ALONG LEADING EDGE OF STRONGEST MID-LEVEL COLD ADVECTION AND DRY SLOT. SEVERE SQUALL LINE...POSSIBLY WITH A FEW EMBEDDED BOW ECHOES AND LEWPS PRODUCING DAMAGING WINDS...ARE POSSIBLE. THIS CONVECTION WILL MOVE EASTWARD AND NORTHEASTWARD ACROSS THE REGION DURING THIS MORNING AND EARLY AFTERNOON. ALTHOUGH LOW-LEVEL INSTABILITY WILL INCREASE OVER MUCH OF THIS AREA DURING THE AFTERNOON...THIS WILL BE COUNTERACTED SIGNIFICANTLY BY WEAKENING TRENDS IN DEEP-LAYER FLOW AND LAPSE RATES ALOFT AS TROUGH MOVES TO THE NORTH-NORTHEAST.

...GENERAL THUNDERSTORM FORECAST DISCUSSION...

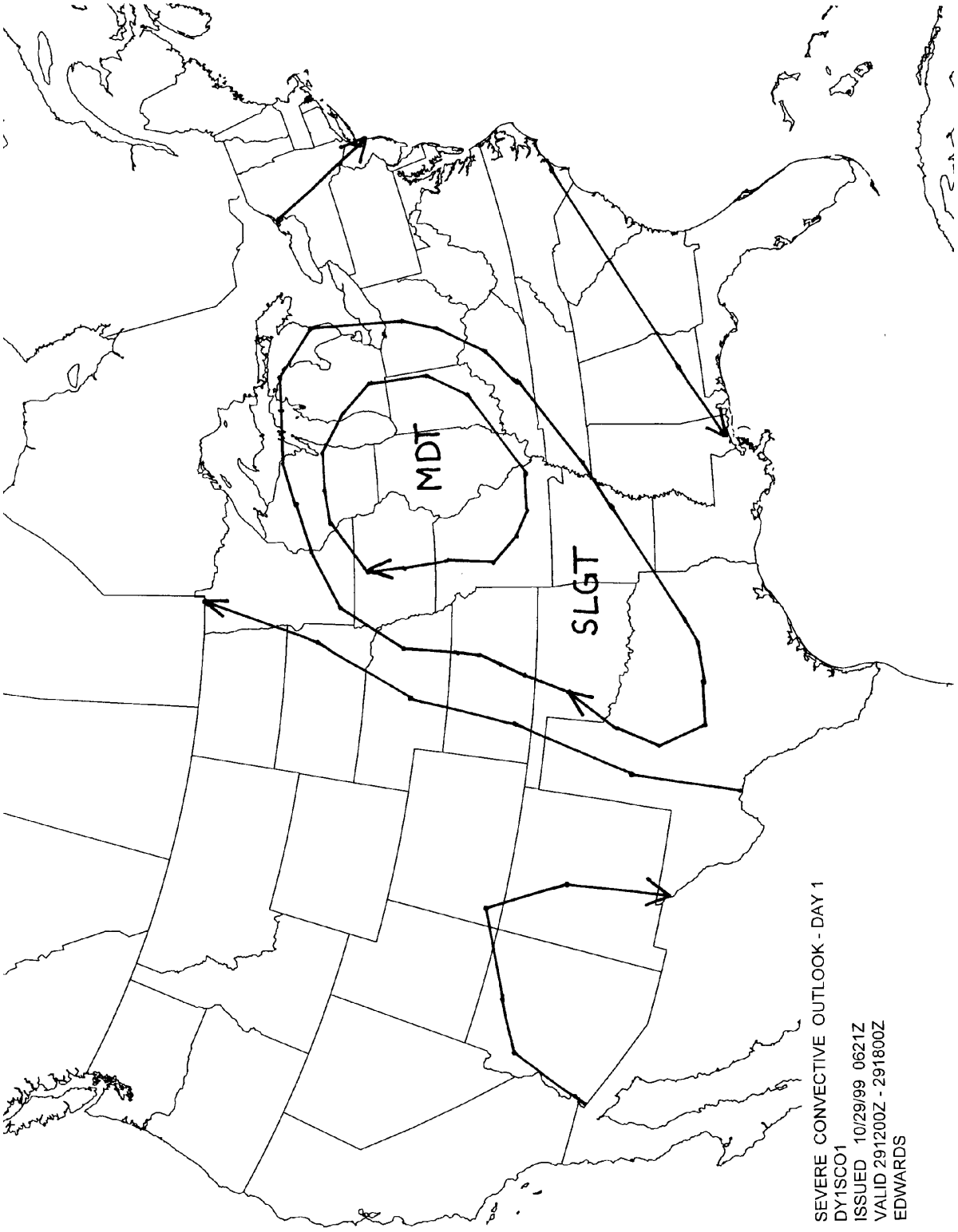
--- SOUTHWESTERN U.S. ---
WIDELY SCATTERED THUNDERSTORMS ARE POSSIBLE...PRIMARILY UNDER COLD CORE ASSOCIATED WITH MID/UPR LEVEL TROUGH. ACTIVITY IS EXPECTED TO BE PRIMARIARLY PULSE TYPE MULTICELL CONVECTION WITH ISOLATED STRONG WIND GUSTS...SMALL HAIL...AND DANGEROUS LIGHTNING. ACTIVITY SHOULD BEGIN TO DEVELOP OVER HIGHER TERRAIN AFTER 29/1500Z AS SURFACE HEATING ENHANCES DESTABILIZATION.

..EDWARDS.. 10/29/99

VALID 291800Z - 300000Z REF AFOS DY1SCO2
(same as above for next 6-hr period)

VALID 300000Z - 300600Z REF AFOS DY1SCO3
(same as above for next 6-hr period)

VALID 300600Z - 301200Z REF AFOS DY1SCO4
(same as above for next 6-hr period)



GRAPHIC: DY1SCO1

Product #2: **DAY 2 CONVECTIVE OUTLOOK**
Product Category: **SPCSWODY2**
Associated Graphics: **DY2SWO1, DY2SWO2**

Purpose:

The Day 2 Convective Outlook is a technical discussion, in plain language (except for universally understood contractions), describing expected convective activity across the CONUS for the 24-48 h period. The product also gives meteorological reasoning.

Intended Audience:

Meteorologists and other sophisticated consumers of weather information.

Brief Description:

The Day 2 Convective Outlook has two basic components: a description of areas where severe convection is expected (via slight, moderate, or high risk areas OR a probabilistic approach); and a section on meteorological reasoning. Areas of General Thunderstorms (non-severe) are also provided. The geographical section uses three-letter location identifiers to define end points that inscribe threat areas. Slight, moderate, and high risk (or probabilistic) areas are treated separately (terminology will likely be modified by Phase II to reflect better assessment of severe convective therat areas). The meteorological reasoning section generally is one or two paragraphs in length, written in plain language except for compass directions and other universally understood contractions.

The Day 2 Convective Outlook is valid for the 24-48 hour period and contains two forecasts of twelve hour durataion through the period (i.e., 24-36 hr and 36-48 hr). The outlook will be updated and released every twelve hours (twice daily; schedule to be determined).

DAY 2 CONVECTIVE OUTLOOK
11/20/97

SPCSWODY2
ACUS02 KSPC 291737
SWODY2
SPC AC2 291737

DAY 2 - CONVECTIVE OUTLOOK

--- SYNOPSIS ---
SURFACE LOW FORECAST TO TRACK INTO CETNRAL NY BY 31/12Z WITH FRONTAL BOUNDARY EXTENDING SOUTHWARD ACROSS CENTRAL PA AND CENTRAL APPALACHANS. 12Z ETA SUGGESTS THAT THE UPPER LEVEL SHORT WAVE AND BEST LARGE SCALE VERTICAL MOTION WILL BE FOCUSED OVER NY/PA BY 31/00Z AS DIVERGENT SECTOR OF 250 MB JET LIFTS ACROSS THE REGION. WEAK FLOW AND LACK OF ORGANIZED SYNOPTIC FEATURES WILL RESULT IN DISORGANIZED CONVECTION FURTHER SOUTH. A WEAK UPPER LEVEL LOW MOVING INTO THE INTERMOUNTAIN WEST MAY ALSO ENHANCE CONVECTION ESPECIALLY IN TOPOGRAPHICALLY FAVORED UPSLOPE REGIONS.

VALID 301200-310000 REF AFOS DY2SCO1

THERE IS A **SLIGHT RISK** OF SEVERE THUNDERSTORMS TO THE RIGHT OF A LINE FROM 20 NNE PBG PSF EWR NHK SHD MGW PIT ERI.

GENERAL THUNDERSTORMS ARE FORECAST TO THE RIGHT OF A LINE FROM LRD AUS SHV JAN TCL HSV LEX TOL APN ...CONT... GCC CYS DEN ALS FMN GCN P38 ENV 27U LVM.

...SEVERE THUNDERSTORM FORECAST DISCUSSION...

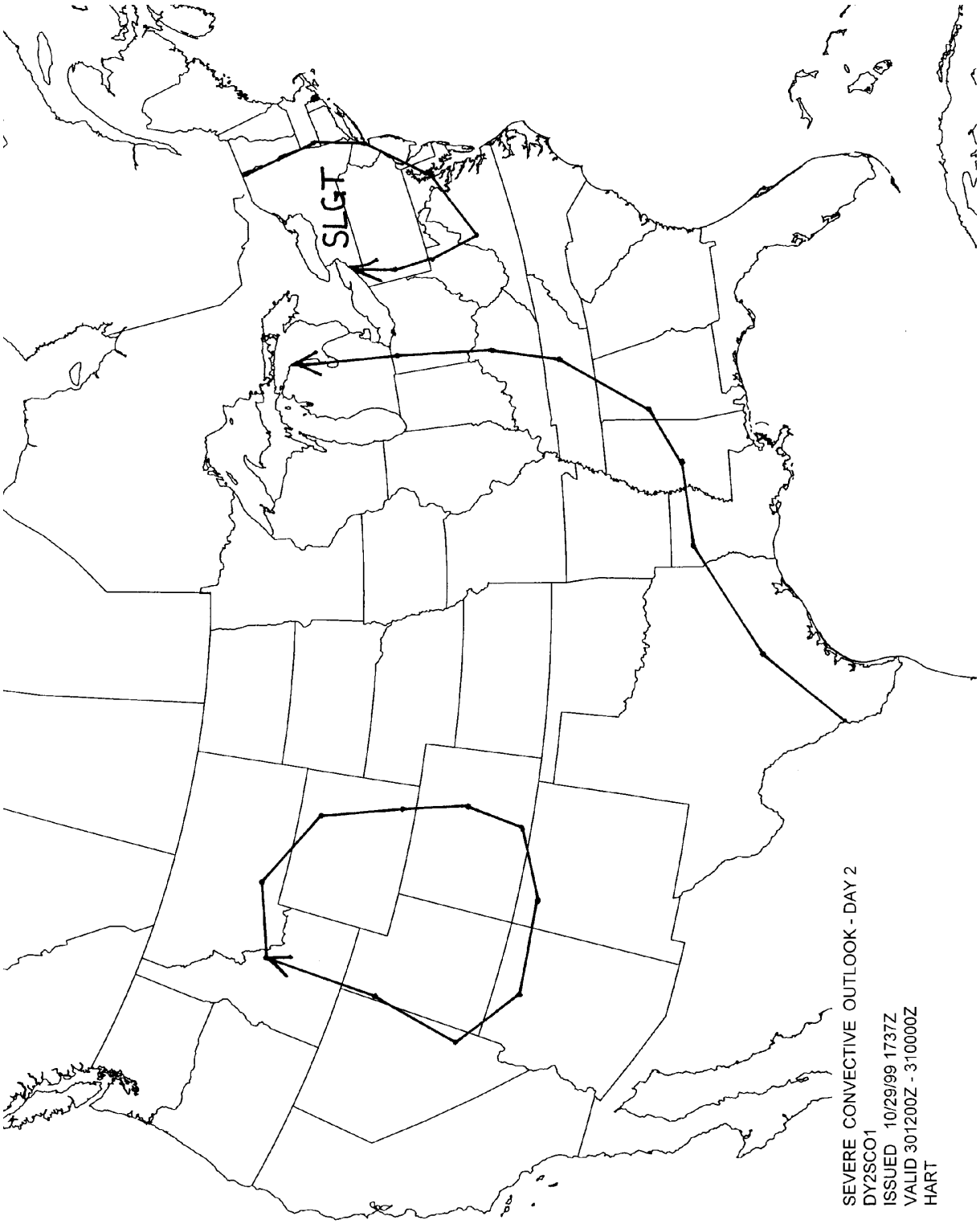
...NY/PA/MD/NORTHERN VA...
VIGOROUS UPPER TROUGH CURRENTLY OVER THE CENTRAL PLAINS IS FORECAST TO SWEEP NORTHEASTWARD ACROSS THE GREAT LAKES REGION AND INTO SOUTHEASTERN CANADA ON WEDNESDAY.
MEANWHILE...ASSOCIATED SURFACE COLD FRONT WILL EXTEND ACROSS WESTERN NY/PA AT BEGINNING OF PERIOD...MOVING INTO WESTERN NEW ENGLAND BY EVENING. ATMOSPHERE AHEAD OF FRONT IS FORECAST TO BE ONLY MARGINALLY UNSTABLE WITH LIFTED INDICES OF 0 TO -1. HOWEVER...90-100 KT WESTERLY MID-LEVEL WINDS AND STRONG CONVERGENCE ALONG FRONT SUGGESTS POTENTIAL FOR NARROW LINE OF LOW-TOPPED SHOWERS AND THUNDERSTORMS CAPABLE OF PRODUCING DAMAGING WINDS.

...GENERAL THUNDERSTORM FORECAST DISCUSSION...

...INTERMOUNTAIN WEST...
DIURNAL TSTMS ARE EXPECTED TO DEVELOP OVER THE HIGHER TERRAIN OF THE ROCKIES AND INTERMOUNTAIN REGION. STRONG SURFACE HEATING WILL RESULT IN STEEP LAPSE RATES OVER MOST OF THE AREA. SCATTERED PULSE TYPE / MULTI CELL THUNDERSTORMS ARE EXPECTED TO CONTINUE BEYOND 31/00Z.

..HART.. 10/29/99

VALID 310000-311200 REF AFOS DY2SCO2
(same as above for next 12 h period)



GRAPHIC: DY2SCO1

Product #3: **PUBLIC SEVERE WEATHER OUTLOOK (PWO)**
AFOS Product Category: **SPCPWOSPC**
AFOS GRAPHICS: **NONE**

Purpose:

The Public Severe Weather Outlook is a forecast of severe thunderstorms and/or tornadoes issued at the Lead Forecaster's discretion when a possible outbreak or major severe weather event is possible. The discussion is written in plain language (except for universally understood contractions), and is intended to encourage enhanced public awareness to possible dangerous and severe weather during the next 24 h period.

Intended Audience:

The Public Severe Weather Outlook is designed for the general public as well as other sophisticated consumers of weather information.

Brief Description:

The Public Severe Weather Outlook has two basic components: a description of the area where there exists a considerable threat of severe weather; and a brief discussion relating timing, expected evolution, areas affected, and basic meteorological reasoning. This text product is written in plain language except for compass directions and other universally understood contractions. Sophisticated users can access additional meteorological information regarding the anticipated event using standard SPC outlook products (SWODY1, etc.).

The PWO is issued on an as needed basis, typically when a major severe weather event or outbreak of severe thunderstorms and/or tornadoes is expected. Initial issuance is typically before 1600 UTC on the day of the event.

Public Severe Weather Outlook (SPCPWOSPC):

11/20/97

SPCPWOSPC
WWUS36 KSPC 290621
PUBLIC SEVERE WEATHER OUTLOOK
STORM PREDICTION CENTER NORMAN OK
1100 AM CDT SATURDAY OCTOBER 25 1997

...OUTBREAK OF TORNADOES AND SEVERE THUNDERSTORMS EXPECTED ACROSS PARTS OF THE SOUTHERN PLAINS...THE WESTERN AND CENTRAL GULF COAST REGION AND THE LOWER MISSISSIPPI VALLEY THIS AFTERNOON AND TONIGHT...

THE STORM PREDICTION CENTER IN NORMAN OKLAHOMA IS FORECASTING AN OUTBREAK OF TORNADOES AND SEVERE THUNDERSTORMS ACROSS EASTERN PARTS OF THE SOUTHERN PLAINS...THE WESTERN AND CENTRAL GULF COAST STATES AND THE LOWER MISSISSIPPI VALLEY THIS AFTERNOON THROUGH TONIGHT. THE AREAS MOST LIKELY TO EXPERIENCE TORNADOES...DAMAGING WINDS...AND LARGE HAIL INCLUDE:

> NORTHERN AND EASTERN TEXAS...SOUTHEAST OKLAHOMA...CENTRAL AND SOUTHERN ARKANSAS...WESTERN MISSISSIPPI AND MOST OF LOUISIANA.

OTHER SEVERE THUNDERSTORMS ARE POSSIBLE OVER THE REMAINDER OF OKLAHOMA... NORTHERN ARKANSAS...EASTERN MISSISSIPPI... ALABAMA... TENNESSEE... AND THE FLORIDA PANHANDLE.

A LOW PRESSURE SYSTEM WILL STRENGTHEN OVER OKLAHOMA THROUGH THIS AFTERNOON BEFORE ADVANCING INTO ARKANSAS LATER TONIGHT. EAST OF THE LOW...WARM MOIST GULF AIR WILL CONTINUE TO SURGE NORTHWARD ON STRONG SOUTHERLY WINDS. MEANWHILE... A COLD FRONT AND ITS ASSOCIATED BAND OF VERY STRONG UPPER LEVEL WINDS WILL SWEEP EAST INTO CENTRAL TEXAS AND OKLAHOMA THIS AFTERNOON BEFORE CONTINUING EAST INTO ARKANSAS AND LOUISIANA TONIGHT. AS THE COLD DRY AIR BEHIND THE FRONT CONVERGES WITH THE VERY WARM AND MOIST AIR TO ITS EAST...VIOLENT THUNDERSTORMS WILL ERUPT. WITH WIND SPEEDS OVER 120 MILES PER HOUR IN THE UPPER LEVELS OF THE ATMOSPHERE...THE POTENTIAL WILL EXIST FOR NUMEROUS SEVERE THUNDERSTORMS AND TORNADOES...SOME OF WHICH MAY BE VIOLENT.

PERSONS IN THE THREATENED AREAS ARE URGED TO REVIEW SEVERE WEATHER SAFETY RULES...AND LISTEN TO RADIO...TV...OR NOAA WEATHER RADIO FOR LATER STATEMENTS AND POSSIBLE WATCHES AND WARNINGS.

...STEPHEN CORFIDI...
STORM PREDICTION CENTER

Product #4: **Mesoscale Discussion (MCD)**
Product Category: **SPCMCDSPC**
Associated Graphics: **SPCMCDGPH**

Purpose:

The Mesoscale Discussion is a short-term technical product written in plain language (with universally understood contractions) that communicates the current judgment of SPC regarding the potential for hazardous weather on the mesoscale (convection, winter weather, etc.) The forecast duration of this product is 0-3 h for convective phenomena and 0-9 h for winter weather (primary focus in winter weather is 0-6h). This product will expand it's content including information on a variety of mesoscale phenomena.

Intended Audience:

The MCD is intended for meteorologists and other knowledgeable customers.

Brief Description:

The MCD is a brief product (generally less than 25 lines of narrative). It is a terse, technical discussion aimed at describing convective or hazardous weather potential for the next several hours. The end points of a polygon around the area of threat are provided at the top and bottom of the product and in an accompanying graphic. State UGC codes are provided in the header of the product.

In Phase II, the MCD can be used as a mesoscale discussion prior to the issuance of an SPC guidance watch or as a status message relative to on-going watches issued by WFOs. The MCD should be issued as needed and dictated by the evolution of mesoscale meteorological processes. This product focuses on mesoscale features associated with a hazardous weather event in the 0-3 h time frame for convective phenomena, and 0-9 h (primariarly 0-6 h) for winter weather. The MCD is written in plain language (with universally understood contractions) that communicates the current judgment of SPC regarding mesoscale (convective) potential.

MESOSCALE DISCUSSION: (MCD)

Type 1: Pre-Watch Discussions

11/20/97

SPCMCDSPC ALL;350,0893 375,0863 402,0850 397,0805 380,0800 350,0810
ACUS03 KSPC 241638
SPC MCD 241638
KYZ000-TNZ000-OHZ000-WVZ000-VAZ000-NCZ000-182300-

SPC MESOSCALE DISCUSSION FOR PORTIONS OF:

EASTERN/CENTRAL TENNESSEE
CENTRAL/EASTERN KENTUCKY
WESTERN NORTH CAROLINA
WESTERN VIRGINIA
WEST VIRGINIA
SOUTHERN OHIO

CONCERNING...SEVERE THUNDERSTORM AND TORNADO POTENTIAL...

ACTIVE WEATHER WATCHES: NONE

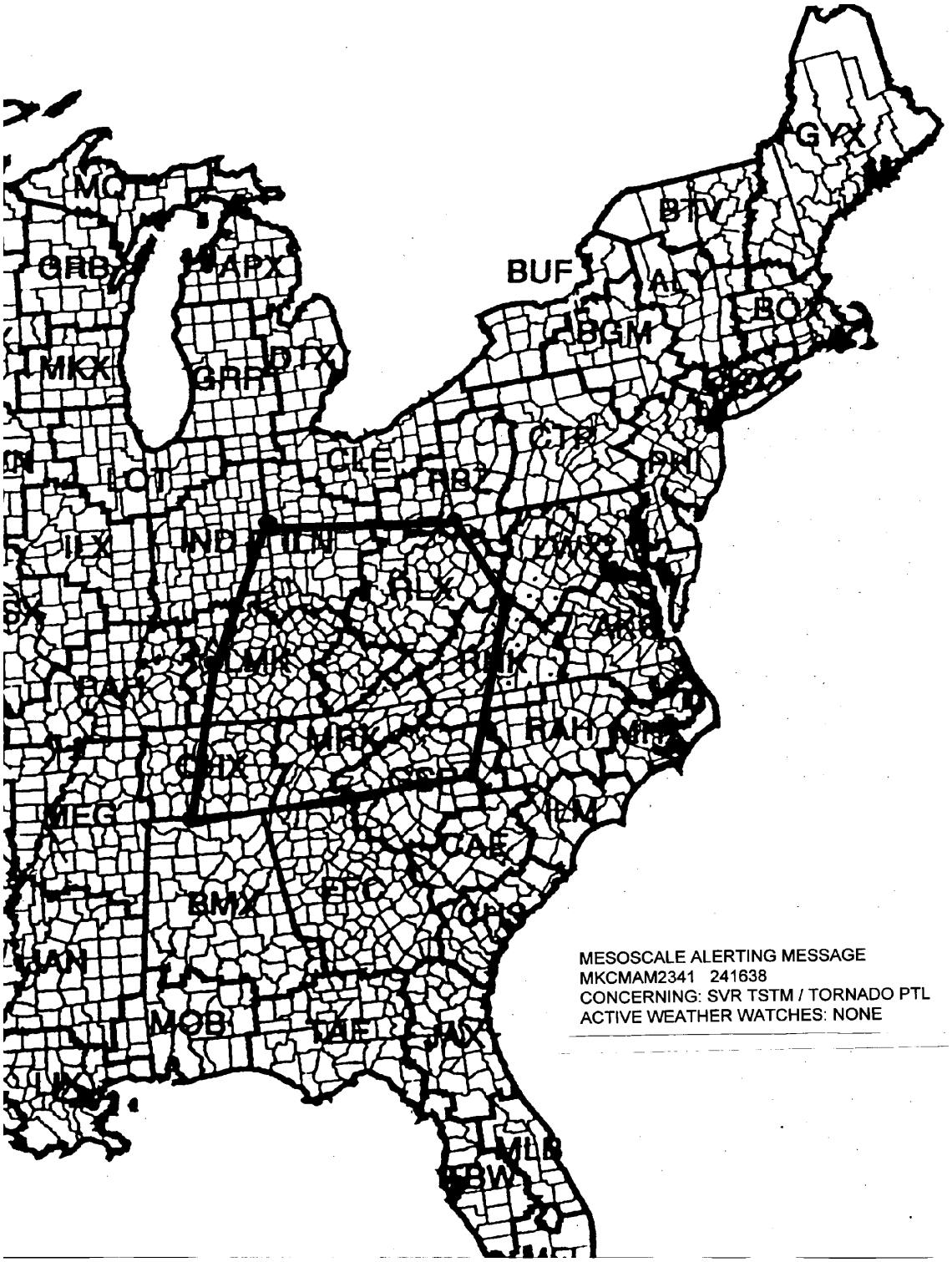
CONVECTION CONTINUES TO SLOWLY INCREASE OVER PARTS OF CENTRAL KENTUCKY AND TENNESSEE. WATER VAPOR IMAGERY INDICATED A STRONG SHORT WAVE TROUGH WITH ASSOCIATED DRY MID LEVEL AIR APPROACHING THE AREA WHERE SURFACE BASED LIFTED INDICES HAVE BECOME EXTREMELY UNSTABLE RANGING FROM -8 TO -12. LATEST WSR-88D IMAGERY INDICATED THAT ACTIVITY NEAR LOZ WAS MID-LEVEL BASED AT THIS TIME. HOWEVER INCREASING REFLECTIVITY IN NEW CELLS TO THE EAST OF THIS ACTIVITY SUGGESTS THAT CONVECTION IS BECOMING ROOTED IN THE BOUNDARY LAYER. CURRENT VAD WIND PROFILES SUPPORT EARLIER MODELS IN INCREASING UPPER LEVEL SOUTHWESTERLY FLOW ASSOCIATED WITH SHORT WAVE WHICH WILL LIKEWISE INCREASE DEEP LAYER SHEAR ACROSS THIS REGION OVER THE NEXT SEVERAL HOURS.

WARM FRONT LOCATED ACROSS SOUTHERN KENTUCKY AND NORTHERN TENNESSEE SHOULD LIFT SLOWLY NORTHWARD THIS AFTERNOON. EXPECT ADDITIONAL ACTIVITY TO BECOME SURFACE BASED AND INTENSIFY OVER THE NEXT SEVERAL HOURS. THIS WILL POSE AN INCREASING THREAT FOR SEVERE WEATHER AND TORNADOES THIS AFTERNOON. GIVEN FORECAST INSTABILITY AND SHEAR PARAMETERS THIS AFTERNOON...A FEW STRONG AND/OR VIOLENT TORNADOES ARE POSSIBLE.

CONVECTION MAY REACH SEVERE LEVELS IN THE NEXT HOUR OR SO.

REF SPCMCDGPH / MCD2341

..EVANS.. 10/24/98



MESOSCALE ALERTING MESSAGE
MKCMAM2341 241638
CONCERNING: SVR TSTM / TORNADO PTL
ACTIVE WEATHER WATCHES: NONE

GRAPHIC: SPCMCDGPH / MCD2341 (Type 1)

MESOSCALE DISCUSSION: (MCD)

Type 2: Watch in Progress

11/20/97

SPCMCDSPC ALL;350,0853 380,0825 390,0830 397,0821 375,0780 350,0795
ACUS03 KSPC 241848
SPC MCD 241848
KYZ000-TNZ000-OHZ000-WVZ000-VAZ000-NCZ000-190100-

SPC MESOSCALE DISCUSSION FOR PORTIONS OF:

EASTERN KENTUCKY
EASTERN TENNESSEE
SOUTHERN OHIO
WEST VIRGINIA
WESTERN VIRGINIA
WESTERN NORTH CAROLINA

CONCERNING...SEVERE THUNDERSTORM AND TORNADO POTENTIAL...

ACTIVE WEATHER WATCHES: WW RLXTOR034
WW LMKTOR023
WW MRXTOR085
WW GSPSVR031
WW RNKSVR042

SUPERCELL IN SOUTHERN WEST VIRGINIA CONTINUES HEADING 250/16 KTS. RECENT VOLUME SCANS HAVE STRONG ROTATIONAL VELOCITIES AROUND 50 KNOTS AND A TORNADO WAS REPORTED WITH THIS STORM IN THE LAST HOUR.

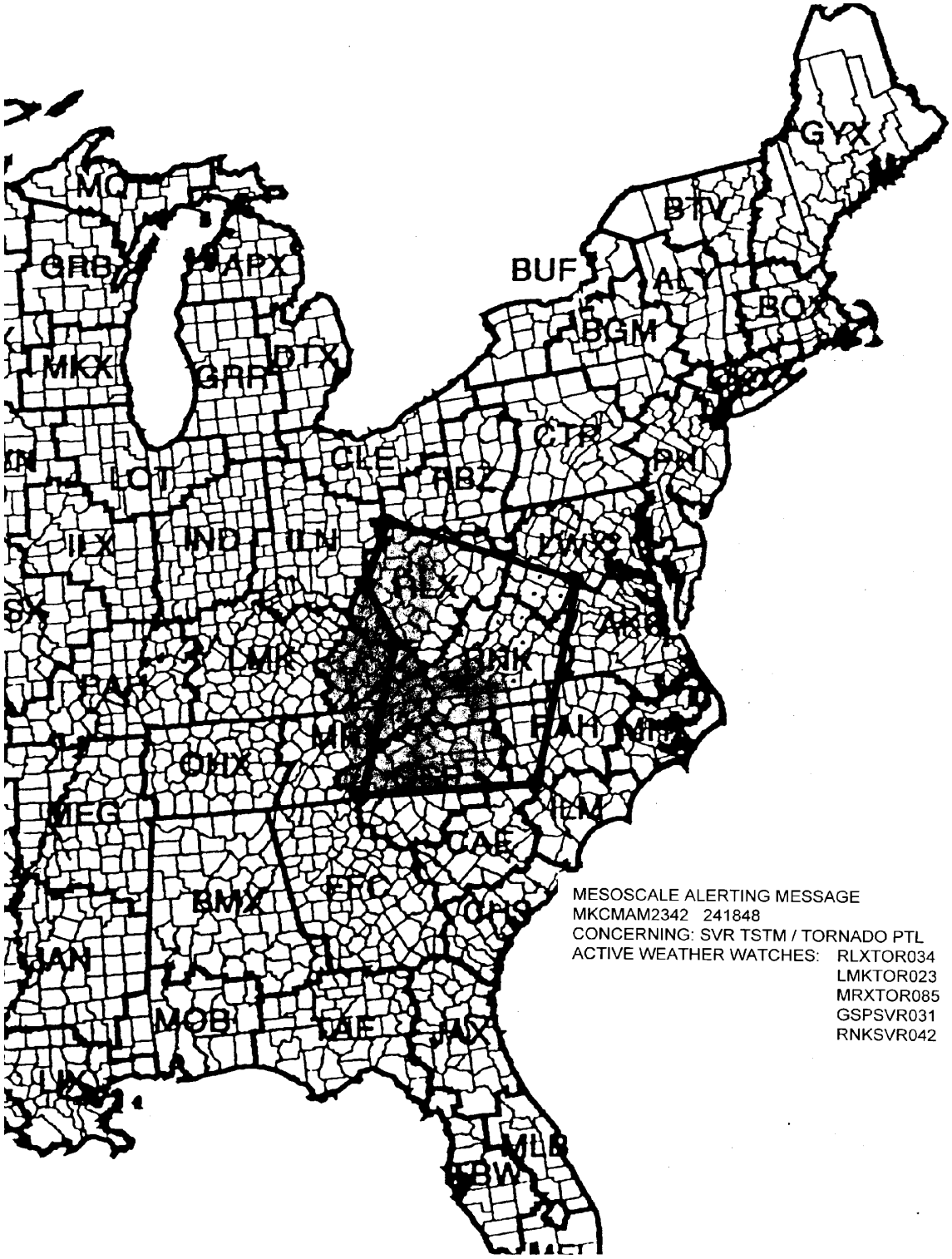
APPEARS THAT THE SEVERE THREAT FOR THE NEXT SEVERAL HOURS WILL BE CONFINED TO EXTREME SOUTHERN OHIO, WEST VIRGINIA, AND WESTERN VIRGINIA.. LARGE HAIL AND TORNADOES ARE STILL POSSIBLE ACROSS THIS AREA. WARM FRONTAL BOUNDARY NOT EXPECTED TO PUSH MUCH FARTHER NORTH AND WEST. ENHANCED SURFACE COOL POCKET DUE TO EFFECTS OF PREVIOUS CONVECTION AND STRONG HIGH PRESSURE OVER GREAT LAKES WILL KEEP BEST INSTABILITY FROM SPREADING NORTH.

WARM SECTOR ACROSS WESTERN NORTH CAROLINA CONTINUES TO DESTABILIZE BUT VEERING SURFACE WINDS HAVE RESULTED IN LESS FAVORABLE SHEAR PROFILE ACROSS THAT REGION. A FEW SEVERE THUNDERSTORMS ARE POSSIBLE ACROSS THIS AREA FOR THE REMAINDER OF THE AFTERNOON WITH THE PRIMARY THREAT BEING HAIL UP TO 3/4 INCH IN DIAMETER AND A FEW WIND GUSTS TO NEAR 60 MPH. CONDITIONS FURTHER EAST WILL HAVE TO BE MONITORED THIS AFTERNOON AS ACTIVITY CONTINUES MOVING EAST AT 15-25 MPH.

DRY INTRUSION AND FRONTAL PASSAGE ACROSS CENTRAL/EASTERN KENTUCKY AND CENTRAL TENNESSEE HAVE STABILIZED THE ATMOSPHERE IN THOSE AREAS AND ADDITIONAL CONVECTION IS NOT EXPECTED THIS AFTERNOON.

REF SPCMCDGPH / MCD2342

..CRAVEN.. 10/24/99



GRAPHIC: SPCMCDGPH / MCD2342 (Type 2)

Product #5: **SPC GENERATED GUIDANCE CONVECTIVE WATCH**
Product Category: **SPCSEVccc**
Associated Graphics: **SPCGWO# (Product #6)**

Purpose:

The SEV provides guidance concerning a threat for severe thunderstorms and/or tornadoes in or near a defined area during a prescribed interval of time. It identifies whether the threat is of severe thunderstorms or tornadoes. A separate SEV is issued for each affected WFO.

Intended Audience:

The SEV is designed for use by WFOs for creation of local severe convective watches. It is intended as an INTERNAL and READY-ISSUE guidance product..

Brief Description:

The SEV is structured to provide a variety of information, both technical and non-technical, in a plain-language narrative. At the beginning and end of the product, end points to a six-sided polygon are listed as latitude/longitude couplets. The polygon inscribes the area of greatest threat.

The first paragraph of the narrative gives a general description of what the threat is and where it is, geographically. It also provides the valid time of the watch, and then gives enhanced wording if the situation is particularly dangerous.

The second paragraph supplies the reader with more specific details about expected conditions. The first of these gives potential hail size, thunderstorm wind gusts, and recommended preparedness procedures.

The third paragraph provides a list of counties included in the guidance watch sorted by state and WFO. The fourth paragraph is preceded by the term “DISCUSSION” and provides a technical synopsis of the meteorological conditions leading to the threat. This is followed by a paragraph preceded by the term "AVIATION" and pertains to specific aviation related data.

The final paragraph refers the reader to local WFOs for additional official information.

SPC GENERATED GUIDANCE CONVECTIVE WATCH (SEV)

11/20/97

SPCSEVRLX ALL;350,0845 371,0847 395,0850 405,0830 397,0803 367,0815
WWUS09 KSPC 241704
SPC WW 241704
WVC005-011-013-017-021-033-035-039-041-043-045-053-059-073-079--085-087-095-099-105-107-
OHC009-053-079-087-105-115-127-163-167-KYC019-043-063-089-115-127-159-242300-

INTERNAL TORNADO WATCH GUIDANCE
STORM PREDICTION CENTER NORMAN OK
1104 AM CDT SAT OCT 24 1999

.THE STORM PREDICTION CENTER HAS RECOMMENDED A TORNADO WATCH FOR THIS SATURDAY AFTERNOON AND EVENING FROM 1:00 PM UNTIL 7:00 PM EDT FOR PORTIONS OF:

SOUTHERN OHIO
EASTERN KENTUCKY
WESTERN VIRGINIA
WEST VIRGINIA

{*option for enhanced wording to describe particularly dangerous situation*}

A TORNADO WATCH MEANS THAT CONDITIONS ARE FAVORABLE FOR SEVERE THUNDERSTORMS AND TORNADOES IN AND CLOSE TO THE WATCH AREA. THUNDERSTORMS IN THE WATCH AREA MAY PRODUCE HAIL UP TO 1 3/4 INCHES IN DIAMETER... WIND GUSTS TO 70 MPH... DANGEROUS LIGHTNING... AND TORNADOES {text optional for situation}. PERSONS IN AND CLOSE TO THE WATCH AREA SHOULD BE ON THE LOOKOUT FOR THREATENING WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE WARNINGS.

THE FOLLOWING COUNTIES IN THE RLX WARNING AREA ARE INCLUDED IN THE GUIDANCE WATCH:

KY
. KENTUCKY COUNTIES INCLUDED ARE:

BOYD	CARTER	ELLIOTT
GREENUP	JOHNSON	LAWRENCE
MARTIN		

OH
. OHIO COUNTIES INCLUDED ARE:

ATHENS	GALLIA	JACKSON
LAWRENCE	MEIGS	MORGAN
PERRY	VINTON	WASHINGTON

WV
. WEST VIRGINIA COUNTIES INCLUDED ARE:

BOONE	CABELL	CALHOON
DODRIDGE	GLIMER	HARRISON
JACKSON	KANAWAH	LEWIS
LINCOLN	LOGAN	MASON
MINGO	PLEASANTS	PUTNAM

RITCHIE	ROANE	TYLER
WAYNE	WIRT	WOOD

DISCUSSION...THUNDERSTORMS HAVE BEGUN TO DEVELOP RAPIDLY ACROSS NORTHERN AND CENTRAL KENTUCKY IN RESPONSE TO A STRONG SHORT WAVE APPROACHING THE AREA. AXIS OF EXTREME INSTABILITY WITH CAPE GREATER THAN 4000 J/KG AND STRONG SHEAR FAVOR SUPERCELLS WITH POSSIBLE TORNADOES DURING THE REMAINDER OF THE AFTERNOON.

AVIATION...A FEW SEVERE THUNDERSTORMS AND TORNADOES WITH HAIL SURFACE AND ALOFT TO 2 INCHES...EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 70 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 600. MEAN STORM MOTION VECTOR 25035.

SEE LOCAL WATCH PRODUCTS FOR OFFICIAL INFORMATION

...GALWAY

NNNN

******NOTE ADDITIONAL GUIDANCE WATCHES WOULD HAVE TO BE ISSUED FOR ILN, MRX, AND LMK******

Product #6 **Guidance Watch Outline**
Product Category (graphic): **SPCGWO#**

Purpose:

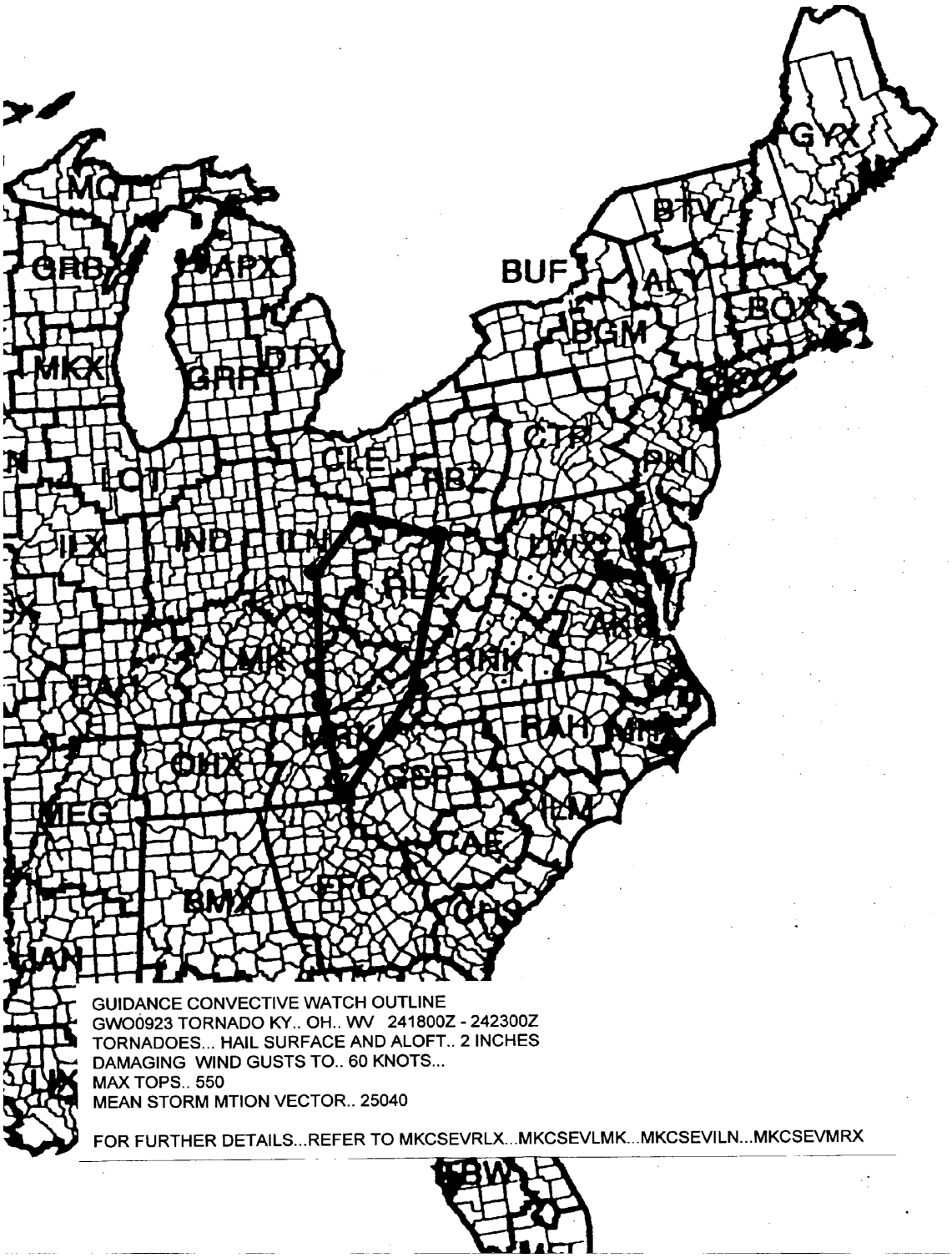
To provide semi-technical one-stop information about an SPC guidance watch and an accompanying graphical outline.

Intended Audience:

NWS Forecast Offices for coordination purposes only. This is intended as an INTERNAL product.

Brief Description:

The GWO is a graphic product intended to provide “one stop” information on an SPC guidance convective watch. It is composed of a brief text message which provides information on the type of recommended watch (tornado or severe thunderstorm), states involved, and valid times. A graphical outline will be provided consisting of a six-sided polygon and affected counties (for NWSFO coordination purposes). In addition, the reader is given specific elements expected with the severe weather: hail size, thunderstorm wind gusts, mean storm motion vector, and maximum thunderstorm tops. The reader is then directed to the SPC convective watch guidance for further details.



GRAPHIC: SPCGWO#

Product #7 **Watch Outline Update Message**
Product Category: **SPCWOUSPC**
Associated Graphics: **NONE**

Purpose:

To provide updated listings of all counties and current outlines of convective watches as provided by WFOs.

Intended Audience:

NCO and other knowledgeable customers.

Brief Description:

The Watch Outline Update (WOU) is a brief non-technical product listing counties currently affected by active convective watches. Listings of counties and UGCs affected are provided for TORNADO and SEVERE THUNDERSTORM watches separately. County listings are further sorted by STATE. No valid times will be provided due to the number and variability of watches issued. A cluster analysis program will generate 6-sided polygons representing active convective watch areas. It is unclear whether discrimination between Severe Thunderstorm and Tornado watches will be made in the listing of 6-sided polygons. The location of the 6-vertices for each polygon will be listed at the bottom of the product and will be giiven in latitude/longitude pairs and aviation VOR point descriptions. This product is scheduled to be automatically generated at intervals requested by NCO or other customers.

WATCH OUTLINE UPDATE MESSAGE (WOU):

11/20/97

SPCWOUSPC ALL 270100;328,0953 339,0944 355,0944 354,0918 329,0920 323,0928;
WOUS52 KSPC 262320
SPC WOU 262320

WW #1002 TORNADO WATCH OUTLINE UPDATE
AVIATION COORDS..38WNW GGG..35NW TXK..20S FSM..27NE LIT..23N MLU..39 SW MLU..38WNW GGG

AS OF 5:20 PM CDT...TORNADO WATCH #1002 REMAINS IN EFFECT UNTIL 7:00 PM CDT FOR THE FOLLOWING LOCATIONS:

$$
ARC011-013-019-025-027-039-051-053-057-059-061-069-073-081-085-091-097-099-103-105-109-113-119-125-127-133-139-149-LAC013-015-017-027-061-111-119-TXC037-063-067-203-315-343-459-270100-

AR
. ARKANSAS COUNTIES INCLUDED ARE

BRADLEY	CALHOUN	CLARK
CLEVELAND	COLUMBIA	DALLAS
GARLAND	GRANT	HEMPSTEAD
HOT SPRING	HOWARD	JEFFERSON
LAFAYETTE	LITTLE RIVER	LONOKE
MILLER	MONTGOMERY	NEVADA
OUACHITA	PERRY	PIKE
POLK	PULASKI	SALINE
SCOTT	SEVIER	UNION
YELL		

$$

LA
. LOUISIANA PARISHES INCLUDED ARE

BIENVILLE	BOSSIER	CADDO
CLAIBORNE	LINCOLN	UNION
WEBSTER		

$$

TX
. TEXAS COUNTIES INCLUDED ARE

BOWIE	CAMP	CASS
HARRISON	MARION	MORRIS
UPSHUR		

$$

;328,0953 339,0944 350,0944 350,0918 329,0920 323,0928;

NNNN

Product #8: **Hourly Severe Weather Report Listing**
AFOS Product Category: **SPCSTAHRY**
AFOS GRAPHICS: **-------**

Purpose:

To provide interested users with an hourly updated list of severe weather reports received at the Storm Prediction Center each day (12 UTC - 1159 UTC).

Intended Audience:

NWS Forecast Offices, media, and other knowledgable customers.

Brief Description:

The Hourly Severe Weather Report Listing provides a compilation of severe weather reports (including tornadoes, large hail and damaging wind) received at the Storm Prediction Center each hour. New reports are appended to previous products. The period of record runs from 1200 UTC until 1159 UTC daily and is updated at the top of the hour.

HOURLY SEVERE WEATHER REPORT (SPCSTAHRY)

11/20/97

SPCSTAHRY
NWUS60 KSPC 200501
STAHRY

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICAITON 'STORM DATA'
FOR 06CST WED NOV 19 1997 THRU 23CST WED NOV 19 1997

EVENT	LOCATION	REMARKS	(CST) TIME

.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....

NONE REPORTED

.....LRG HAIL / STRONG WIND RPTS.....LRG HAIL / STRONG WIND RPTS.....

1	WNDG	DOUGLAS COUNTY NV TREE DOWN ON US50	(18 ESE TVL) RNO/LSR	19/1315 388311974

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....

NONE REPORTED

Product #9: **Daily Severe Weather Report Listing**
AFOS Product Category: **SPCSTADTS**
AFOS GRAPHICS: **-------**

Purpose:

To provide interested users a list of severe weather reports received at the Storm Prediction Center between 12 UTC - 1159 UTC each day.

Intended Audience:

NWS Forecast Offices, media, and other knowledgable customers.

Brief Description:

The Daily Severe Weather Report Listing provides a compilation of severe weather reports (including tornadoes, large hail and damaging wind) received at the Storm Prediction Center each day. The period of record runs from 1200 UTC until 1159 UTC daily. The product is produced at 1200 UTC daily.

DAILY SEVERE WEATHER REPORT (SPCSTADTS)

11/20/97

SPCSTADTS
NWUS61 KSPC 201215
STADTS

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICAITON 'STORM DATA'
FOR 06CST WED NOV 19 1997 THRU 06CST THU NOV 20 1997

EVENT	LOCATION	REMARKS	(CST) TIME

.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....

NONE REPORTED

.....LRG HAIL / STRONG WIND RPTS.....LRG HAIL / STRONG WIND RPTS.....

1	WNDG	DOUGLAS COUNTY NV	(18 ESE TVL)	19/1315
		TREE DOWN ON US50	RNO/LSR	388311974

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....

NONE REPORTED